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The Sir Charles Hastings Lecture

ON

ART AND FASHION IN MEDICINE

BY

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I realize both the privilege and the responsibility of celebrating the memory of the founder of this Association; an Association which has grown in usefulness and extent beyond the most ardent expectations that Sir Charles Hastings can have formed. I thank the Council for the honour it has conferred on me in asking me to undertake this task.

Sir Charles Hastings founded this Association at the very time when medicine was attempting to become more scientific. Methods of auscultation and percussion were still comparatively novel, while only four years previously Wöhler had broken down the wall between organic and inorganic chemistry. Thus biochemistry and exact methods of clinical observation came to birth about the same time; long may they go hand-in-hand to promote the science of medicine.

Science builds up steadily on the foundations already laid down; art is more at the mercy of changing fashion. Indeed, to-day many of the arts seem anxious to disregard tradition altogether; to a medical audience it would sound sinister to say that they claimed to be new growths. But medicine, while becoming increasingly scientific, must remain always largely an art, and one which must be scrupulous to retain such traditions as are of proved value and of good report. And as I think of the marriage of science to art in medicine, the vision rises before my eyes of the Ionian Sea. We had sailed from Athens and passed Sunium, where the marble columns of the temple still shine in the sun, marking the point at which the homeward-bound Athenian caught the first glimpse of the glittering spear held by the statue of Pallas Athene on the Acropolis. We had threaded between many islands, and just before we reached Rhodes another island arose, blue cliffs out of a deep blue sea. It was Cos, the cradle of medical science. Here, under the fostering care of Hippocrates, temple ritual was invaded by the methods of the medical school. Magic was replaced by observation. Disease was no longer regarded as the work of evil spirits or the result of spells cast from without, but as the logical outcome of disturbed natural processes. But, in spite of that revolutionary idea which replaced the priest by the physician, man, like Lot's wife, is all too prone to look back, longing to return to the past, with its ritual and magic.

Early Greek Therapeutics

Cawadias takes the view that the medical art was not practised during the first few centuries of the temple's prosperity. The earlier methods were rendered impossible in course of time by the rapid growth of scepticism. People refused to believe in miracles, and new methods had to be devised if the temple was to be supported as in times past. The work of healing had now to be carried on by medical science and hygienic treatment, while the cult had still to be preserved. Thus arose a combination of therapeutics and religious worship. To the success of the treatment, which in itself was hygienic, the healthy situation of the temple and the health-giving waters of the sacred well would largely contribute.

To this day the belief in the health-giving waters of the sacred well persists, and invalids flock in crowds to spas to drink of waters that are often nauseous unless plentifully flavoured by faith. They attribute to these waters the benefit they derive from a pleasant holiday in a healthy place, aided by massage, electricity, and medical skill. The ordinary hygienic measures ordained by Aesculapius were cold bathing, bleeding, anointing with mud or sand, walking with bare feet, exercise in the open air, and riding. The medicinal remedies were varied and curious. Sometimes operations were carried out under the influence of hypnotism, as the discovery of a

number of steles at Epidauros in 1885 has shown. But a very important part of the treatment was the interpretation of dreams by priests, which was accepted as a divine inspiration. From this developed a more or less definite psychotherapy.

Cleanliness, fresh air, dream analysis, and psychological explanation, these were the cardinal tenets of the Aesculapian cult, and it is a striking fact that all of them were almost lost by medicine until quite recent times. The bathroom was an almost unknown adjunct to a private house until about 1860. Fresh air was anathema for the sick until about the beginning of the present century. Prior to that night air was imagined to be fraught with deadly perils. The patient with a delicate chest had every breath of fresh air carefully excluded from his room, and when he walked abroad he was muzzled with a black gag, most inappropriately termed a respirator. Until the war psychotherapy was looked upon as a crank, and studiously avoided by the majority of the medical profession as savouring of quackery—hence the rapid growth of Christian science.

To-day we have returned to the cult of Aesculapius and are his faithful disciples. But the history of his cult provides us with an interesting example, first, of the making of a god, and then of the replacement of his magical methods by lay medicine. Is not this the whole history of therapeutics? Organotherapy sprang from crude sympathetic magic, and the savage warrior ate the heart of his foe to acquire his bravery and strength. To quote Dr. Charles Singer:

"The overwhelming mass of earlier Greek medical literature sets forth for us a pure scientific effort to observe and to classify disease, to make generalizations from carefully collected data, to explain the origin of disease on rational grounds and to apply remedies, when possible on a reasoned basis." But, "There is ample evidence that the Greeks inherited in common with many other peoples of Mediterranean and Asiatic origin a whole system of magical or at least non-rational pharmacy and medicine from a remoter ancestry. . . . That human bodies are and normally remain in a state of health, and that on the whole they tend to recover from disease, is an attitude so familiar to us to-day that we scarcely need to be reminded of it. We live some twenty-three centuries later than Hippocrates; for some sixteen of these centuries the civilized world thought that to retain health periodical bleedings and potions were necessary. For the last century or two we have been gradually returning to the Hippocratic position."

I wish particularly to stress a saying of Alcmaeon's in 500 B.C.: "Health depends upon harmony, disease on discord within the body." For this, however inadequately achieved, was the aim of the Aesculapian cult.

Humanity's Craving for Magic and Authority

There was much in the temple ritual which may seem like quackery to-day, but I would prefer to call it psychotherapy, adapted to the needs of those times. To-day there is still a craving for magical cures: the common phrase "it worked like magic" expresses that deep if subconscious desire. After all, our reason is a much more recent acquisition than our emotions. Our forefathers, for many thousands of years, depended for healing on magic alone; even the first approaches to rational medicine are as yesterday compared with the reign of magic. That alone would suffice to make the appeal of the quack the more powerful, for he appeals to an incredibly old Adam, who claims many descendants. And when health is shaken it is the most recently acquired, the highest levels of the central nervous system that most easily lose control, and the primitive man peeps out of the cave in which reason has shamefacedly tried to conceal him.

In addition to a craving for magic there is another tendency, which affects us all: to seek security in authority. There are some things about which it is too painful to be in doubt. Certainty is sought in authority, without too critical an inquiry into the source of that authority. This tendency has repeatedly asserted itself in the history of medicine, and has frequently delayed its progress. The authority of Aristotle, of Galen, and of the Church has each, in turn, been detrimental in this respect. Whereas Hippocrates placed reliance on general methods, Galen exalted the importance of drugs, a fact of which the term "galenicals" still reminds us. Galen departed from the simplicity of Hippocrates and evolved such subtle and complicated theories, such definite and artificial classifications, that the original doctrines were almost lost sight of, especially in therapeutics. Not only so, but the mediaeval mentality, always subservient to authority, elevated Galen's writings to the level of Papal infallibility, to question which was blasphemy. Only among the Arabs and at Salerno in Italy was the torch kept feebly burning. It required the sceptical inquiring mind of the Renaissance, the rebirth of the Greek spirit in fact, to fan that torch into flame again.

The craving for magic and authority which is inherent in us all, especially when we are ill, has undoubtedly helped the doctor in the treatment of his patient. The gold-headed cane of the physician of the past became his rod of Aesculapius, and when he cast it aside and tried to appeal to rational and scientific procedures he lost a powerful weapon. In no other way can I account for the fact that at a time when medical science has been advancing at a rate previously unknown, there is more scepticism and doubt as to the value of the services we render than ever before. Our patients may like us as individuals, but as a profession we have a "bad press." Anyone who does not realize this must have been taken aback at the bitter hostility shown towards the medical profession displayed at a recent debate in the House of Lords.

It is worth while to consider some of the causes of such grievous misunderstandings between those who desire restoration of health and those who sincerely wish to help people to achieve it. For no one who has lived among doctors can doubt that they are filled with a genuine zeal for healing.

The Methods and Appeal of the Quack

No one is entirely rational, and everyone, when ill, is less rational than usual. The late Dr. Gee told me that once Sir William Gull was descanting at dinner on his favourite topic that the successful medical man must be a bit of a quack. It is the old story, he said, *plebs vult decipi*. Dr. Martin promptly translated this as "the public like to be gulled," but his witticism was not appreciated by Sir William. I would prefer to put it that the quack obtains his success by unintelligent, and often dishonest, psychotherapy. He can only be defeated by psychotherapy that is both intelligent and honest. The quack uses both authority and magic. He adopts an air of infallibility which is impressive but unwarranted. A doctor with his knowledge of the limitations of his art cannot honestly assume that air. A quack seizes on the latest scientific discovery and turns it to magical ends. We have seen hypnotism, electricity, radium, and light each in turn exploited in this way, and I was not surprised lately to hear of a quack who purported to cure by cosmic rays. The patient knows that each of these discoveries has scientific sanction, and is therefore favourably disposed towards their therapeutic use. He thinks the orthodox profession is too conservative to accept them, and he does not realize that any agency powerful enough to have a beneficial effect can also have a harmful one if unskilfully or ignorantly employed.

But there is another reason for the appeal that quackery makes, and one less creditable to our profession. The boundaries of medicine are coterminous with life: medicine touches life at every point. It is an enormous field to cover, and I would assert that every successful form of unorthodox practice owes its success to neglect of some part of that field by us. The bone-setter owes his success to the disregard of manipulative surgery in the past; the homoeopath to our former failure to apply expectant treatment.

Expectant treatment does not mean "wait and see"; it means following the natural course of the disease, ready to help Nature at the appropriate moment, ready to relieve symptoms as they arise. It involves care that our remedies should not do harm. The homoeopath at

least uses remedies that cannot do harm, and he waits upon the *vis medicatrix naturae*. But he asserts as a generalization that like cures like, and maintains that anyone who does not accept this generalization must believe that unlike cures unlike, and labels him an allopath. This is as logical as a man asserting that the moon is made of green cheese, and when we deny it labelling us as chalkites on the strength of the saying "as different as chalk from cheese." If we do not believe it is one, it must be the other. We accept no such generalizations; we study the reactions of the individual to the invasions of disease, and are prepared to adopt any means that offer reasonable expectation of helping the patient.

I have said before, and despite the protests I then received I repeat, that the great defect of homoeopathy is that Hahnemann's conceptions, though in some respects progressive at the time he enunciated them, have been crystallized into a creed by his disciples. The fact that he nauseated himself by a large dose of cinchona bark, and, like many severely nauseated persons, he shivered, does not prove that quinine cures malaria because both produce similar symptoms. The discovery of the malarial parasite and of the destructive action of quinine and other drugs upon it should call for a revision of such a theory. Instead, I find in a standard textbook of homoeopathy—although it urged, as indeed we shall all concede, that such drugs act by arousing reactions in the body itself—that small doses of quinine are all that are required. This directly conflicts with the clinical experience of observers in malarial districts, and can only be upheld by those who have conceptions fixed by a creed.

That syphilis may become resistant to arsenic, as it may by repeated small dosage, is similarly claimed as a proof of homoeopathy, whereas it seems to me to prove the exact opposite. I shall have to say something on the principle of effective dosage presently. Many ideas in orthodox medicine originated from no more reasonable grounds than Hahnemann's upsetting himself with cinchona; but we are free to cast these aside, and we do so as knowledge progresses. Similarly, Christian Science owed its rise to the fact that pre-war medicine was far too materialistic. We did not allow sufficiently for the influence of the mind upon the body. But Christian Science, while recognizing this, merely meets it by suggesting that the cause of a mental distress does not exist; it makes no attempt to bring the cause of such distress into consciousness, thus enabling it to be dealt with; it may confer a temporary passive immunity, as it were, but it cannot confer an active immunity which enables the mind to deal with the trouble in the many forms that a psychoneurosis, like a chameleon, may assume. Moreover, I am suspicious of a cult which, while profoundly convinced of the unreality of pain, has an equally profound belief in the reality of money.

Osteopathy

But the cult which to-day is raising a threatening head against the whole body of natural science is osteopathy. There is gross misconception on this subject. Most laymen with whom I have discussed the subject have been under the impression that it is merely a grander name for bone-setting. So far is this from being the case that their favourite—Sir Herbert Barker, for instance—could actually be prosecuted for practising his art if the Bill for the Registration of Osteopaths, now before the House of Lords, becomes law in the form in which it passed its second reading.

For the fundamental conception of osteopathy let us turn to the actual declaration of its founder, Dr. Andrew Still of Kansas. He said:

> "The cause [of disease] can be found and does exist in the limited or excited action of the nerves which control the fluids of part or the whole of the body. . . . He who wished to successfully solve the problem of disease or deformity of any kind in every case without exception would find one or more obstructions in some artery or vein. At an early day this philosophy solved to me the problem of malignant growths and their removal by a restoration of the normal flow of arterial fluid."

According to Still this obstruction to the artery or interference with the nerve was caused by the pressure of maladjusted bones, especially in the vertebral column. Now it is a fact that this osteopathic lesion of the spine has never been observed by any biologist, anatomist, physiologist, or pathologist. *X*-rays do not show it. If such a lesion exists, it is almost inconceivable that it has escaped the observation of the workers in these sciences and that evidence of scientific value cannot be brought forward in support. Yet it has been seriously proposed not only to allow osteopaths to sign death certificates, but to make it an offence for anyone, even a doctor, to practise manipulative methods unless he is a registered osteopath.

I may well be challenged to explain the successes of osteopaths. Eliminating, as one must in fairness, the cases of hysterical conditions which would be cured by any method of treatment sufficiently impressive, there remain cases which are amenable to skilful manipulative treatment. We must distinguish between osteopathy as a craft and as a theory of disease. As a craft it can conceivably be useful if the diagnosis has been made by a fully trained and qualified man. There are qualified surgeons who have studied the osteopathic method of treatment, who accept its limitations, and, most important of all, who know when not to use it. Most of us could relate grim tales of the disasters following its use in unsuitable cases. I will relate one. A lady was sent to me on account of severe pain radiating along the eleventh and twelfth left ribs. She had been to an osteopath, who had violently swung her round "to put the bone in place," causing her excruciating agony. The most superficial inquiry would have revealed the fact that she had had her left breast removed for cancer eighteen months previously, and an *x*-ray examination revealed the presence of secondary growths in her vertebral column. Great suffering was caused by ignorance of an ordinary medical fact.

But if the theory of osteopathy is right then the whole body of scientific evidence that has been laboriously built up during the last hundred years or so by workers all over the civilized world is wrong, root and branch. Are you prepared to make such a sweeping assertion? An able writer on military subjects wrote to me saying that medical qualifications did not confer gifts of healing, and that untrained persons might possess them. Perhaps so, but I do not see why, if registration by the General Medical Council cannot confer healing gifts, registration by a College of Osteopaths should be able to do so. "Safety first" should be our motto in medicine, and safety is best ensured by an all-round training from the basal sciences to clinical medicine. But the medical profession has never attempted to prevent others from practising its own method. Methods of treatment that prove successful have before now been based on false premisses, but this is the first attempt to make such false premisses an exclusively recognized precedent to treatment. I distrust all slogans in medicine, whether "like cures like" or "pain is a false alarm" or "all disease is due to an osteopathic lesion." The body is too complicated a mechanism only to go wrong in one way. Incidentally these slogans are also mutually incompatible. If one is right the other two are wrong.

At the Hunterian Society recently the president, Dr. Oxley, speaking of the different cults which arose inside and outside the profession, said that if anyone, anywhere, or in any way, could find any single thing which would be of the slightest advantage to the ailing or the sick, the medical profession was the first to bring that something within its fold. Mystery was one of the essentials of these cults. These cults, however, never had a long life. Sometimes they died by being brought within the fold of medicine if there was any good in them, and if there was not, then when the wonderful man of magnetic personality responsible for them departed this earth they also died. I might add in answer to the gibe so often made that the profession has at first rejected doctrines which subsequently proved to be correct, that if some

truths have been so rejected it does not follow that the doctrines we reject are necessarily true. Yet that attitude is implied by the rejected in medicine, in art, and in literature alike.

Some Other Causes of the Profession's "Bad Press"

Another source of misunderstanding, and a very fertile one, is that patient and doctor do not speak the same language. The patient seeketh after a label and for a cause. Yet the label cannot convey much to the mind of someone who has not been through an elaborate training, and a training which has taught him that the cause of many diseases is unknown. My fellow Regius of Oxford, Sir Farquhar Buzzard, dealt with this aspect in his Maudsley Lecture with his accustomed clarity and good sense. He said:

"The man in the street is familiar enough with the term 'scientific research,' but has little conception of how scientific observations are registered and controlled, how deductions are tested, and hypotheses scrapped. He lives in another world, and is content to welcome a 'new discovery,' sensational enough to attract notice in the Press, as a bolt from the blue, or as a species of miracle, and to accept it without interest in its origin, its evolution, or the authority on which it is proclaimed."

Sir Farquhar's remedy for this difficulty is not "to bring the layman, totally unprepared, face to face with the spectre of disease through the agency of lectures, of the Press, or of the wireless," but to make biology, the science of life, part of general education. Everyone should know something of the nature and facts of life before taking on its responsibilities. He went on to say:

"To observe, follow, and appreciate the scrupulous precision and cautious control of any scientific inquiry would not only engender an early and enduring relish for Nature's verities, but avert the flagrant and pathetic credulity so characteristic of those who have had no such education. Further, a more general desire to seek after truth, and a greater disinclination to accept statements from all kinds of sources at their face value, would be of immense advantage to the future of civilization as a whole, quite apart from their effect on the practice of medicine."

I would suggest an additional argument for the study of biology. This is an age of machines, and we are becoming machine-minded. People who know every detail of a motor car may know nothing of physiology, and so come to think of their bodily mechanism in terms of engines—a very false analogy. Incidentally, this makes them more impatient with the doctor, who cannot supply a spare part, and who forbears to remind them that a motor car is often scrapped.

Another cause of our unpopularity as a profession is the mistaken idea the public have of the canons of medical etiquette, which they regard as an awesome mystery. As I told a distinguished luminary of the Church, who wished me to treat him behind his doctor's back, medical etiquette is merely the application of the golden rule, "Do unto others as you would they should do unto you." This I said, knowing that I should see his face no more. Yet it is true. Just as we are genuinely anxious to treat our patient honestly and do our best for him, so we act towards our colleague, in the belief that he is similarly actuated. If the patient will put himself in the position of trying to do his best for someone, and consider how he would wish others to behave to him while so doing, his own good feeling should solve for him all questions of medical etiquette.

Some Conceptions of Disease

To come back to first principles, What is disease? It is surprising to find how fashion has influenced this fundamental conception. And for a masterly historical review of fluctuating views on that point I would refer you to Sir Gowland Hopkins's anniversary address before the Royal Society last November. He shows that the reality of diseases as independent entities has been supported, challenged, and reasserted throughout the history of modern medicine. If Harvey was the first to bring the experimental method into medicine, Sydenham was its Linnaeus. He believed that every disease was an entity quite apart from the particular patient who displayed it, and that our first duty was to reduce diseases to certain definite species with the same care that botanists were then using in their description and classification of plants. Even at the beginning of the nineteenth century, when the great French school arose, most of their eminent physicians accepted Sydenham's view, though Bichat interpreted it in the light of morbid anatomy. But Broussais vehemently protested against the conception of diseases as actual entities. At best they were metaphysical abstractions; no two cases displaying certain morbid symptoms were ever identical. Meanwhile the art of clinical description was being developed, particularly in London and Dublin.

For Bichat it was the tissue, not the organ, to which we must look for the explanation of disease. Histology pushed the problem further back with the aid of the microscope, and the cell became the centre of interest. With the introduction of cellular pathology, humours and diatheses were relegated to the limbo of superstition. Virchow declared that there was no such thing as a sick body that was disordered in all its parts, and maintained that no doctor could systematically think of a morbid process unless he was able to assign to it a place in the body. The part for him became greater than the whole. But as we shall see, humoral pathology and diatheses were to come creeping back, though with new and more scientific attributes.

The Passing of Morbid Anatomy, and other Changes

The late Dr. Crookshank used to refer sarcastically to the mortuary and veterinary schools of thought, meaning the methods of morbid anatomy and experimental physiology. It is interesting to note the rise and fall of morbid anatomy. Rokitansky in Vienna said in 1846: "Pathological anatomy should be the base not only of the knowledge of physicians but also of their practice, as it contains all there is in medicine of positive knowledge." Great as have been the services of morbid anatomy to medicine no one would make such a claim as that to-day. Its great defect was that it concentrated on end-results, a stage in which the patient is not interested. The strength of its influence was amusingly illustrated when I became demonstrator of morbid anatomy at St. Bartholomew's Hospital. The post-mortem register was still labelled "Register of Complete Cases." There you have it—no medical case complete until the post-mortem table is reached! The mortuary school. That able physician the late Sir James Goodhart in 1912 sensed the passing of morbid anatomy, taking that subject for his Harveian Oration. He said: "Whereas we used to display disease in the gross—the results of disease, that is—we are now able to recognize finer changes behind these results, and they are the goal that we make for now." A little later on he made a remark which now falls strangely on our ears: "I struck a hybrid the other day—a biochemist"! When I read these words recently after an interval of nearly twenty-three years I realized with a shock how swiftly fashions change. Morbid anatomy, experimental physiology, bacteriology, each in its turn has brought great gifts to medicine, but at the moment it is to the biochemist that we are looking, and not in vain, for most help. But of that more anon.

Exactly comparable changes have been occurring in neighbouring sciences. Professor MacBride has recently called attention to the fact that Huxley would persist in looking at animals as material structures and not as living active beings; in a word, though he invented the term biology, he was a necrologist rather than a biologist, a student of the dissected corpse rather than of the living organism. And his dominating influence emphasized the morphological at the expense of the functional among zoologists for many years. It underlies the tenets of Weissman, that Calvinist among biologists, but is now being rapidly modified by the recognition of the part which function and habit play in moulding structure. Hence the rise of the school of experimental zoology. Just so in medicine, the methods of biopsy now made

possible by surgery and radiology are profoundly modifying our ideas of anatomy and pathology. There are few more hopeful signs in medical education than the way that the modern-minded anatomist is demonstrating the body in action instead of relying simply on the dissection of a corpse which has been modified, in some respects beyond recognition, by preservatives.

From Bacteriology to Biochemistry

Pathological anatomy was, of course, profoundly modified by the discovery of micro-organisms and the rise of bacteriology. No one is likely to decry a science which has given us antiseptics and antitoxins, but it is equally true that bacteriology has not brought us all the gifts anticipated. For it soon became obvious that there were two factors in infection, the seed and the soil, and the importance of the latter has become increasingly recognized. There was not only the microbe which invaded the individual but the reaction of that individual to the microbe to be considered. Cellular pathology was deprived of its pride of place, and humoral pathology regained its popularity with the growth of serology. And out of these various movements biochemistry arose.

It is true that physiological chemistry started with Wöhler, but its change of name indicated a change in the point of view. Just as morbid anatomy was concerned with end-results, so was physiological chemistry: the finished secretions and excretions were its principal concern. Next the interest shifted to a stage further back to the blood, the living medium of exchange, and then biochemistry took up the running and interested itself in the tissue cell and its environment: not the dead cell, as in cellular pathology, but the living cell, with its constant chemical and physical changes. Biochemistry came flooding into medicine with the discovery of hormones and vitamins, revealing a new group, the deficiency diseases, and illuminating a group already known, the endocrine diseases. With the aid of the strict technique of the organic chemist, the intimate structure of these substances is being daily made clearer, and we are amazed to find the close chemical association between such apparently diverse things as the stimulants to reproduction and the growth of bone, the carcinogenetic substances and the organizer, or to use its newest name, the evocator of development in the embryo.

When we add to this the work which Sir Henry Dale has now been able to carry to a triumphant conclusion, showing that all nervous mechanisms produce their effect through the intermediary of chemical substances, it is evident that on the laboratory side the growing point of medicine is biochemistry. Indeed, the public have caught up this idea, and are acquiring an exaggerated and uncritical belief in biochemistry. It is a real danger at the present time that uncritical applications of that admirable science are being made, and the patient is presented with a huge "dossier" of data unintelligible to him, and I suspect to the practitioner as well, which greatly fosters the introspective tendency of the former.

It is curious that it was just during the most materialistic phase of medicine that scepticism as to the efficacy of drugs was most rife. The discovery that the body itself manufactured drugs, as it were, such as thyroxine, adrenaline, pituitrin, and insulin, restored the belief that it could be influenced by chemical means. The discovery of vitamins proved how infinitesimal the dose of such chemical substances need be. The discovery that many drugs act by facilitating or checking the entrance into the tissue of the chemical substance liberated by nervous stimuli opens out a new vista of what one may call natural pharmacology. Our drug treatment must aim at assisting as far as possible the chemical reactions of which the body is the laboratory. Another thing which had been realized is the importance of the effective dose. This we have learned from a study of the anaemias, which has shown that both liver and iron are useless unless a certain dosage is adopted, at which level benefit rapidly ensues. Insulin also has taught us the paramount importance of adjusting our dosage to metabolic requirements. With these new developments in scientific pharmacology, we can have a more assured confidence in influencing the body by chemical means, and the fashion of agnosticism on that subject until recently prevalent may well now vanish.

Place of Psychology in Medicine

But drugs are not the whole of medicine, and a new and fashionable development must now be considered—psychotherapy. Psychology was for long a purely academic study, allied to philosophy and metaphysics; it was studied merely by the method of introspection. Then Wundt developed the experimental method, which in a way was the extension of the study of the special senses, concerning itself with the mechanism of perception and not merely of reception of stimuli. Finally, a breach in the great wall of psychology was made by medical men, and the whole subject was transformed, while the influence on medicine has been profound. The individual patient again begins to count for something. As Dr. Bernard Hart has said: "He was no longer regarded as 'the uninteresting vehicle of a fascinating disease process.'" The dualism of mind and body has broken down under the assaults of psychologically minded physicians, and diseases and unhappiness alike can be seen as the resultant of forces in the individual and his environment. The psychiatrist and the biochemist can find a common meeting-ground in the fact that all nervous mechanisms produce their effect through the intermediary of chemical substances. This new synthesis of mind and body, this conception of the individual as a dynamic entity, is the outstanding achievement of twentieth century medicine, and will greatly influence its future.

The old psychology started from the premise that man is a rational being, while the new merely regards him as in the process of becoming one. Consequently the old psychology conspicuously failed to help medicine, whereas the new is already fruitful in results. For to say that man is a rational being is just about as correct as saying that you and I are living in a free country. Both statements express a wish rather than a fact.

But we must not expect too much, or too soon. The Freudian is so occupied with the drains that he can hardly spare time to consider the rest of the house, while Jung is apt to retreat into the clouds of mysticism. For the practising physician who is constantly seeing patients troubled in mind, body, or estate, either singly or simultaneously, Adler's simpler technique of individual psychology has an increasing appeal. But I do emphatically believe in Jung's dictum that it is the general urge of life rather than the particular urge of sex or self-assertion which drives us on towards finer adaptations and fuller satisfactions.

The unfortunate thing is that each school of psychotherapy contends for some part of the truth, but none of them is sufficiently prepared to recognize that the other possesses some different part of the truth. This limitation of view is particularly noticeable among the Freudians. For them there is one god, the unconscious, and Freud is his prophet. There are the sacred books in which the truth has been once for all revealed, and there is the heresy hunt and solemn excommunication by bell, book, and candle. Surely all this suggests a religious cult rather than a scientific procedure. It is inconceivable that the first explorers into this uncharted sea can possess the whole of the truth. That is not the way in which a science is built up, and psychotherapy, long intuitively practised by doctors, must become really scientific if it is to be of real help. What the patient says is not evidence, the experimentalist maintains, whereas the tracing on a smoked drum is. But for the psychotherapist, the patient's statement *is* evidence, even if it is evidence that he is deceiving himself.

For me the significance of the modern return to Aesculapius is the recognition of the importance not only of the disease which the patient has, but of the patient who has the disease, his reactions as an individual, his environment, and his hereditary trends. The old adage "Examine the whole of your patient" thus assumes a new meaning. It is by this combined attack on the physical and psychological side that medicine in the future will make advance and still further aid human suffering. The doctor of the future will have to come

doubly armed: with material aid for material troubles and with psychotherapy for distresses of the spirit.

I have tried to deal with some of the changing fashions in the art of medicine seriously, but they have their lighter side. Dr. Robert Hutchison has aptly called a fashion an epidemic fad, but considers that in order that the faddist may infect others and make his fad epidemic he must be a person of some importance. Smaller fashions die with or before their originator, larger ones seldom survive into the third generation. The path of medical progress is strewn with the wrecks of discarded fads: bottles of soured milk, piles of special food innocent of the smallest trace of purines, broken electrical apparatus, innumerable tablets confidently recommended by manufacturing chemists, there they all lie. And which of us can lay his hand on his heart and truthfully say he never used any one of them?

The Public's Changing Fads and Fancies

Already I see the shades of oblivion stealing over remedies popular in 1934, but I forbear to particularize. We must exercise our critical faculties and refuse to be stampeded. It is not easy, for the pressure from without is incessant. Never have people fussed more about their health than to-day; for many it has replaced fussing about sin and their souls. The most alarmist ideas are promulgated; we are a nation of degenerates, they scream, and we are poisoned by our daily food. Meanwhile, the average span of human life steadily increases, and many deadly diseases have been scotched. Alarm is not the road to happiness or health. The diet faddist is perhaps the most vocal to-day. I cannot forbear to quote from Dr. Hutchison's wisdom again:

"One swears by wholemeal bread, one by sour milk; vegetarianism is the only road to salvation of some, others insist not only on vegetables alone, but on eating those raw. At one time the only thing that matters (is) calories; at another time they are crazy about vitamins or about roughage. . . . The scientific truth may be put quite briefly: eat moderately, having an ordinary mixed diet, and don't worry. . . . Likes and dislikes, however, should be listened to; they are nature's indication of what probably agrees or disagrees. As to calories, our appetite . . . is usually a trustworthy guide in health. Leave raw vegetables, except salads, to the herbivorous animals. There is no wonderful merit in wholemeal as opposed to ordinary bread. Don't scrape up your insides with much roughage, as it is more likely to do harm than good . . . vegetarianism is harmless enough, though it is apt to fill a man with wind and self-righteousness. It is specially unsuitable for growing children and sedentary workers. Lastly, it is well to remember that few diseases are caused or cured by diet alone, and that, in particular, diet has nothing to do with cancer. . . . It is true, I believe, in the bodily as well as the spiritual sphere, that he who will save his life shall lose it."

Art and Science in Medicine

It would, I think, be fair to say that the art of medicine is the application of scientific knowledge to the relief of the individual. That there are these two aspects, and that neither is sufficient alone, must be kept in the forefront of our minds. The ultimate aim of all our training is the prevention and relief of suffering. Medicine as a pure science can never be as satisfactory as other pure sciences, where the problem to be investigated can be rigidly limited and experiments carefully controlled. Our problems are generally too urgent to permit of this: the patient clamours to be relieved and that right quickly. The body of clinical evidence has to be built up slowly and fallacies in it may be difficult to detect. On the other hand, medicine practised purely as an art, as in fact it was for centuries, mainly resolves itself into the exercise of the influence of a strong personality over an ailing one. It was when medical art began to rely for its data on scientific observation that it really started that extraordinarily rapid advance which the last century has seen, and which is going on with increasing acceleration. This, I fear, has led in some quarters to a persistent depreciation of the art, which is unfortunate.

Clinical observation has provided much of the material for scientific research; it hinted at the functions of each of the ductless glands before the physiological laboratory was aware of them; it provided evidence that contributed to our knowledge of the life history of the blood corpuscles, both red and white; and it advanced our knowledge of the functions of the nervous system, to quote a few examples. It was to a large extent the desire to relieve suffering that stimulated the scientific curiosity of anatomists, physiologists, and pathologists. But as these subjects grew it inevitably happened that they became too large to be included in the daily work of any practising medical man, however industrious and gifted. More and more they became branches of special knowledge controlled by specialists. Forty years ago nearly all the teachers in such subjects at a medical school were men waiting for promotion to the clinical staff. That is only true to a very limited extent to-day. The change has undoubtedly led to a higher standard of knowledge in these subjects, but it has also tended to produce a divorce between the ward and laboratory, which we must deplore and which many are trying to reconcile.

Sir Gowland Hopkins recently expressed his opinion that there was now a degree of mutual respect between those who pursued one or the other method that was perhaps lacking in the past. To some extent this is true, but it is still only too common for the teachers of the basal sciences to send the students on to the wards with a feeling of inferiority. Just as it used to be said that the fool of the family was destined for the Church, now some laboratory teachers seem to regard medical practice as only suitable for their third-class man. This is a really pernicious habit of mind, which is bound to affect injuriously the supply of first-class men who are needed to help in the advance of medicine, and should not be given the impression that clinical medicine is something which any fool and an occasional knave can acquire in a few months. To employ another simile from the motor car, an engineer may know its structure and its running capacity intimately from his work in the testing room, but that in itself does not make him a skilled driver. For that road sense is required, and the factory is not the place to acquire it. The ideal conditions of the testing room do not obtain amid crowded traffic.

To change the simile, recently within the space of four days I had the opportunity of hearing the same music performed by two pianists, each of world-wide reputation. Each displayed admirable technique and execution, yet one seemed to reveal a much deeper meaning in the music than the other. And as I listened a parallel between medicine and music came into my mind. The novice finds the technique difficult to acquire, but having acquired it it becomes second nature. That is his science. But there is practically no limit to the ways in which he can apply that technique. That is his art. The easier the technique becomes the freer are his energies to find ever deeper meaning in his work, the more subtle his interpretations. In short, the more useful can he be to his patient and to the community. Medicine is a department of biology, and the patient must be considered as a whole, as a living organism reacting to changes in the external and internal environment. If we so regard it applying scientific technique in its widest sense to problems of the individual and the community, the art of medicine will continue to advance despite the vagaries of fashion. I will say in the words of Dr. James Collier, whose recent death we all deplore, "that it is unwise to sneer at what the past has done, unwise to extol what your own generation has performed, and most unwise of all to denounce too quickly what a succeeding generation is doing."

In Roman times the statue of Aesculapius was carried from Epidauros to Tiber Island, but it was something more important that Rahere brought from Tiber Island to England: it was the spirit of Aesculapius, opening the path from the temple to the medical school. Man is always too ready to mistake the symbol for the reality: the stone on which the laws are graven is apt to become more sacred than the laws themselves; but the statue of Aesculapius is unavailing if the spirit dies.

PSYCHONEUROSIS AS A CAUSE OF INCAPACITY AMONG INSURED PERSONS*

A PRELIMINARY INQUIRY

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The Inquiry

The consecutive case records of 1,000 insured persons (excluding pregnant and puerperal women) who had been certified as unfit for work and examined by a medical referee were analysed with a view to determining the proportion incapacitated by psychoneurotic disorder.

Incidence of the Psychoneuroses and Age and Sex Distribution

TABLE I.—*Numbers, Percentage, and Sex Distribution*

	All Causes	Psychoneurosis	Percentage of Psychoneurosis
Males	581	184	31.67
Females	419	151	36.04
Total	1,000	335	33.5

Table I shows the sex distribution of the total patients and the number and percentage of those who were disabled by psychoneurotic illness. Irrespective of sex, roughly one-third of the patients referred for examination are allocated to the psychoneurotic group. The proportion is slightly higher in females (36 per cent.) than in males (31.7 per cent.). This difference is statistically negligible—that is to say, a difference as large as this could readily occur in samples of this size in the absence of sex difference of incidence.

TABLE II.—*Age and Sex Distribution*

Age	Both Sexes			Males			Females		
	A. C.	Ps.	Per cent.	A. C.	Ps.	Per cent.	A. C.	Ps.	Per cent.
16-24	239	64	26.78	84	12	14.29	155	52	33.55
25-34	239	93	38.91	130	49	37.69	109	44	40.37
35-44	193	96	49.74	134	71	52.99	59	25	42.37
45-54	178	60	33.71	120	39	32.50	58	21	36.21
55-64	151	22	14.57	113	13	11.50	38	9	23.68
Total	1,000	335	33.50	581	184	31.67	419	151	36.04

A.C. = All causes. Ps. = Psychoneurotic illness.

Table II and Fig. 1 show the figures set out in age and sex groups. For the sexes combined a well-defined age variation is noticeable. Thus in the youngest age group the proportion of persons incapacitated by psychoneurotic illness is under average. In the succeeding ages the incidence increases to a maximum of about 50 per cent. at ages 35 to 44. After this there is a steady fall till the end of industrial life, the rate in the final age group (55 to 64 years) being less than half the gross rate at all ages.

Taking the sexes separately an interesting difference is apparent. Whereas for the sexes combined the incidence of psychoneurotic disability increases from the beginning of industrial age to a maximum in the age group 35 to 44 and thereafter steadily falls, this trend is much more defined in males than in females. The age differences among females are, in fact, statistically insignificant. In view, however, of the similarity in the general curve of each sex it is possible that with a more extensive series of cases the female differences might be real. The differences in males are definitely significant in the statistical sense.

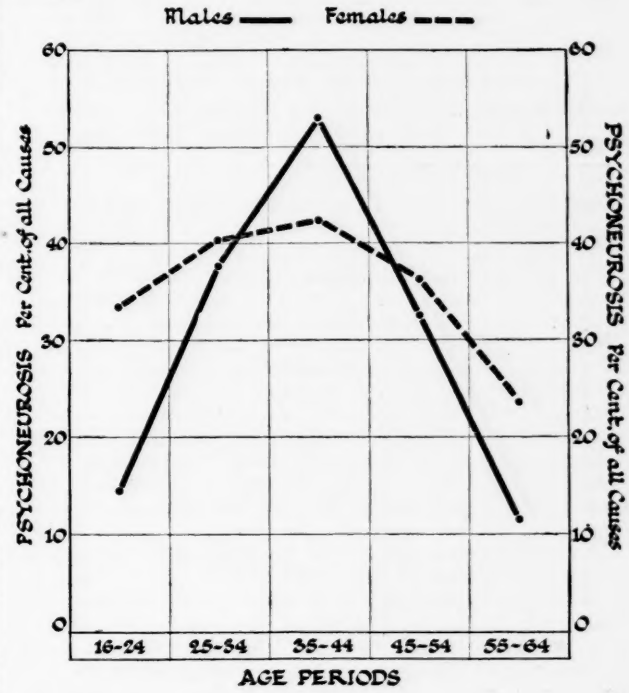

FIG. 1.

COMMENTS

The sample cannot be described as a random one of the insured population. The standard of selection for reference is not uniform,* and many persons who have been incapacitated for a short period have recovered before being seen by an independent examiner. The results of the analysis cannot, therefore, be applied indiscriminately to the insured population in receipt of sickness benefit.

The finding that in females there is no obvious increase at the period of the menopause is surprising, and may have been due to the method of selection adopted. The middle years of the male, however, when responsibilities are greatest and a career is made or broken, seem to be an age peculiarly liable to nervous breakdown. At the peak period of the days of his life he tends to "Look before and after, and pine for what is not," and by means of an illness escape the responsibilities of an immediate or future environment hard to contemplate steadily. Burns expressed the mood when he wrote: "But oh, I backward cast my ee on prospects drear; an' forward tho' I canna see, I guess and fear."

Unemployment in Relation to Incidence

For each case examined a note was made of the duration of unemployment, if present, prior to the onset of

* The first part of this article was printed in the *Supplement* for March 9th, p. 85.

* An insured person before obtaining monetary benefit under the national health insurance scheme is required to provide his approved society with a certificate signed by his panel practitioner to the effect that the person is "incapable of work." Such certificates continue to be issued, usually at weekly intervals, so long as the practitioner is of the opinion that the incapacity prevails. Any person certified as unfit for work may be referred to a medical referee appointed under the Act, either by his approved society or by his practitioner, for the purpose of obtaining a further opinion on "capacity" or "state of health." The majority of the referees are, in fact, initiated by the societies on the question of "capacity for work." The grounds on which approved societies select patients for further examination are various—for example, duration of illness, nature of disability specified by the practitioner, information received from a sickness visitor to the effect that the patient is looking better or moving about freely, etc.

the incapacity. Table III shows the crude comparison between the percentage of psychoneurosis among those who were working at the onset of the disability and those who were out of work, irrespective of the duration of unemployment. It will be seen that in the sexes com-

TABLE III.—*Percentage Incidence of Psychoneurotic Disability in the Employed and Unemployed*

	Both Sexes	Males	Females
Employed	32.43	28.03	37.22
Unemployed	35.61	37.02	32.35

bined 32.4 per cent. of the employed were disabled from psychoneurosis, whereas of those out of work 36 per cent. were disabled from this cause. For the whole series there is, therefore, a slightly higher incidence in the unemployed than in the employed, but the difference is inappreciable. Taking the sexes separately a distinct difference appears in respect of unemployment. Thus in employed males the proportion of psychoneurotic disability is 28 per cent. ; in males out of work the percentage is 37. The difference of 9 per cent. is statistically significant. In females, on the other hand, the difference tends to be in the reverse direction, the females out of work having a lower incidence (32 per cent.) than those employed (37 per cent.), but the difference is negligible in size.

An attempt was also made to investigate the influence of varying periods of unemployment on the incidence of psychoneurotic disability. It must be realized that with the more intimate subdivision necessary to determine this point the numbers in each subgroup progressively diminish, and the proportions are thereby more liable to chance error, with the result that the differences become of doubtful significance. Table IV and Fig. 2 illustrate the result. They show the percentage incidence of psychoneurotic disability in relation to varying periods of unemployment. For the combined sexes the lowest percentage incidence is found among those who had been unemployed for a period of less than three months. This figure, 25.7 per cent., is actually less than the incidence, 32 per cent., found among those who became unfit while engaged in employment. With lengthening unemployment, however, the incidence increases to reach a maximum (41.5 per cent.) in the period 6 to 12 months, and an almost equally high figure (41.1 per cent.) in the succeeding period 1 to 2 years, and thereafter the incidence declines. For the sexes taken separately the trend is similar.

COMMENTS

Table III suggests that in the event of unemployment the male is more likely to break down than the female. It is likely that unemployment acts mainly indirectly not only by the injury which it does to a man's proper pride, but also through the lowering of his standard of living, family unhappiness, etc. Psychologists, however, have long recognized a change of occupation or an unsuitable occupation—even when involving no financial embarrassment—to be among the precipitating causes of nervous breakdown, and in this respect unemployment *per se*, being both a change and unsuitable, may be regarded as a directly precipitating factor. Among females, on the other hand, the findings suggest that to be engaged at work is more productive of mental stress than to be at home. There may therefore be some truth in the Victorian proverb, at present discredited, to the effect that "Woman's place is at home." In the absence of data concerning marital status and family responsibilities, further inference cannot be drawn from the present inquiry.

The findings dealing with the effects of varying periods of unemployment coincide with the personal accounts by individuals out of work which are contained in *Memoirs of the Unemployed*.[10] The editors of this volume summarize the phases following loss of a job as "a progression from optimism to pessimism and from pessimism to a kind of fatalism." Fig. 2 is a graphical expression of this progress. It suggests that after falling out of work there is a short period of a sense of release (a holiday freedom) ; gradually anxiety and depression set in with loss of mental equilibrium ; finally, after several years, adaptation takes place to a new and debased level of life, lacking hope as well as fear of the future.

Sir George Newman, in an exhaustive survey of the effects of unemployment,[11] stated that "there is at present no available medical evidence of any general

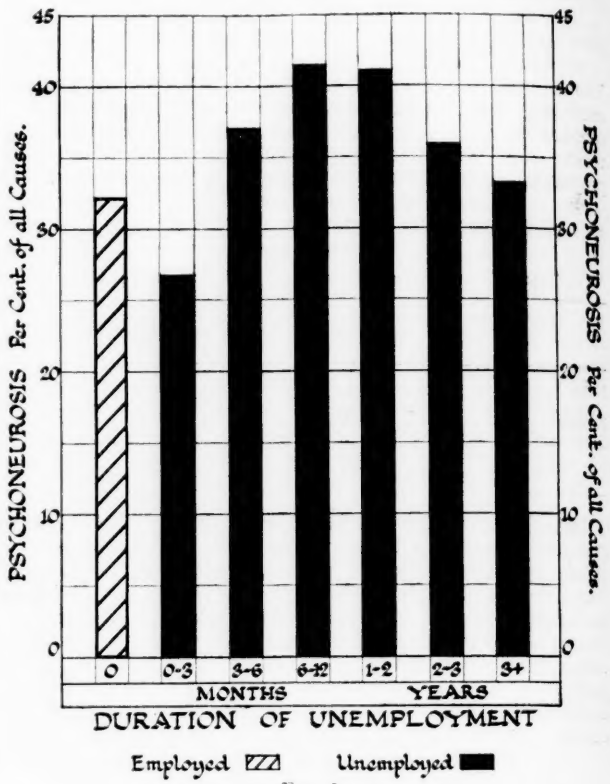

FIG. 2.

increase in physical impairment, in sickness, or in mortality as a result of economic depression or unemployment." He considered that the "hardship, social ill, and anxiety which unemployment inflicts" were "not measurable." Table IV does, however, give some

TABLE IV.—*Percentage Incidence in Relation to varying periods of Unemployment*

Period of Unemployment	Both Sexes	Males	Females
0	32.43	28.03	37.22
– 3 months	25.68	26.83	24.24
– 6 ,, ...	37.10	35.29	39.29
– 1 year	41.51	42.11	40.00
– 2 years	41.10	41.33	40.00
– 3 ,, ...	35.90	38.24	20.00
+ 3 ,, ...	33.33	36.67	16.67
Total	33.5	31.67	36.01

numerical expression to the effect of prolonged unemployment on efficiency for work. From this and the negative findings of Sir George Newman in respect of physical impairment and mortality, we may conclude that unemployment primarily influences the mind rather than the body. The findings of the effect of the duration of unemployment on the production of psychoneurotic breakdown have a bearing on the problem of the care of the unemployed inasmuch as they indicate that measures of prevention should not be long delayed after the onset.

Certified Causes of Incapacity

Table V shows the chief causes of incapacity certified to the approved societies under which the majority of these disabilities lie hidden. Of the 335 persons incapacitated by psychoneurotic illness, only seventy-seven were labelled as such, being described as "neurasthenia," "nervous debility," "neurosis," etc. (Six of the patients labelled by the practitioner as suffering from "neurasthenia" were found to be suffering from organic disease of the central nervous system.) In about one-fifth of the total psychoneurotic disabilities symptoms were referred to the stomach, and the diagnosis was given as "gastritis," "gastic ulcer," "duodenal ulcer," or "operation for ulcer." Of the forty-four persons certified as suffering from "anaemia," eighteen—that is, 41 per cent.—were not anaemic as revealed by blood examination at the date of inspection. The group labelled "debility" is small, but the proportion in which psychoneurotic disorder was disguised is high—namely, 61 per cent. "Rheumatism," including lumbago, sciatica, and neuritis, is a common designation, and provides a high proportion of psychoneuroses (39 per cent.). In "heart disease," on the other hand, the proportion is low—14 per cent.

Only about one-fifth of the patients disabled by psychoneurotic illness were certified to be suffering from this group of disorders. The commonest labels were gastritis, debility, anaemia, and rheumatism, providing 69, 61, 41, and 39 per cent. respectively. Actually gastritis and rheumatism provided the greatest *volume* of psychoneurotic incapacities.

COMMENTS

The labels specified in the table cover half the total cases examined, but these include over three-fourths (77 per cent.) of the disabilities due to psychoneurosis. It will be noted that the majority of these diagnoses are descriptive of one or more of the symptoms of anxiety state. Thus gastritis refers to pain or discomfort in the abdomen with or without flatulence or vomiting; anaemia refers to pallor and a complaint of weakness; debility indicates a complaint of exhaustion with possibly a hint of the weary, anxious countenance and the posture of dejection; rheumatism (including neuritis, sciatica, and lumbago) refers to a pain in the extremities or back. The usage of these terms as a cover of a psychoneurotic illness has been noted by various authors—for example, Culpin,[6] Ross,[9] and Lockhart.[12]

I have discussed this problem of nomenclature with many practitioners, and they all agree that the use of certain labels is not intended to indicate that a patient has a "specific disease." The employment of such terms as gastritis, anaemia, and rheumatism is a convenient way of expressing in concise form the "reason" for "bodily or mental disablement" which is required in certificates issued under the National Health Insurance Act. Recently Lockhart,[12] writing about "diagnoses limited to one or two names," stated: "These stereotyped descriptions of highly complicated processes are, with few exceptions, valueless to the student of social problems. The certificates deal largely with symptoms or symptom-complexes, to which orthodox labels have been given. They are merely evidence that a person is ill and is entitled to sick benefit." With this statement most practitioners will agree. The problem is widely recognized, and in present circumstances it is difficult to see what alternative symbols could be used. The employment of such labels, however, without due appreciation of their inadequacy, may result in both practitioner and patient accepting the existence of a specific disease which is not there—a solution not unacceptable to a patient suffering from psychoneurosis.

The word "gastritis" is unfortunate, because of its strong suggestion of organic disease. Its repeated use in certificates (week by week) has a cumulative influence analogous to that of Coué's formula (day by day), but as its suggestion is towards morbidity the effect is to confirm the conviction of illness and increase the forebodings of the patient. The idea of "anaemia" is less difficult to dispel, as examination of the blood conclusively settles the question of its presence or absence. "Rheumatism," even among the laity, is regarded as an indefinite term. The use of the still vaguer word "debility," although not officially encouraged, is perhaps the least harmful in its power of morbid suggestion.

Discussion

This inquiry into a subject which has considerable bearing on the public health must be regarded as a preliminary one. As mentioned previously, further surveys are in progress, and these will attempt to analyse the problem in fuller detail. So far as they have progressed they are substantiating the volume of disablement due to psychoneuroses. For reasons stated earlier, the findings of the present inquiry cannot be applied indiscriminately to the sick insured population as a whole. An attempt was made to pursue the subject further by analysing the proportion of the "suspect" diagnoses (see Table V) given

TABLE V.—*Reasons for Incapacity given by the Practitioner, the Proportion of Cases of Psychoneurotic Disability under each heading, and the Percentage of Psychoneurotic Disability under each heading to the total Psychoneurotic Disability*

Practitioner's Diagnosis	Total Cases	Psycho-neurosis	Percentage of Psychoneurosis	Percentage of Psychoneurosis to Total Psychoneurosis	
Gastritis	72	50	69.44	15.5	
Gastric and duodenal ulcer	22	9	40.91	2.7	
Ulcer and operation	19	8	42.11	2.4	
Anaemia	44	18	40.91	5.4	
Debility...	18	11	61.11	3.3	76.7
Chill	13	5	38.46	1.6	
Rheumatism	145	57	39.31	17.0	
Heart disease ...	87	12	13.79	3.5	
Neurasthenia, neurosis, etc.	83	77	92.77	26.3	
Other causes	497	88	17.70	23.3	
All causes	1,000	335	33.50	100	

to those patients who were written off the sick list before examination or who failed to attend. The proportion was, however, practically identical with that found in the present series. It may therefore be conjectured that among the non-examined referred persons psychoneurosis acted as a reason for incapacity to an extent no less and no greater than in those who attended for examination.

No corresponding inquiry seems to have been made in this country. In America, in a series of 935 unselected "medical cases" in hospital and private practice, Reynolds[13] found that 200 (21 per cent.) were ill because of psychoneurosis. He gives no details about age or sex distribution—factors which, along with unemployment, will affect the incidence of psychoneurosis in any group examined. Buck[14] states that one-third of the patients who consult a doctor do so, not because of organic disease, but because of "personality disorder." This estimate shows an exact correspondence with the incidence in the group of insured persons examined in the present inquiry. In a survey of 2,000 consecutive ambulatory "cases" seen in the medical department of the Boston Dispensary[15] a diagnosis of psychoneurosis was made in 36 per cent.; an additional 9 per cent. had symptoms of "neurasthenia," but in these instances organic disease was also present. In England comparable figures are lacking. The following, however, have a bearing on the subject. Lockhart, quoted by Gillespie,[7] states that "in certain industries as much as 60 per cent. of the time lost through sickness is lost through psychoneurotic illness of some kind or another." Cassidy[16] noted that 29.5 per cent. of the persons seen by him in consulting cardiological practice were "neuropathic," and showed no evidence of organic cardiovascular disease. Hardy,[17] discussing functional disorders of the colon, mentions that the figures of certain English and American observers

show that these account for 20 to 30 per cent. of all "abdominal conditions." He notes that early middle age (30 to 40) was the period of greatest prevalence.

Whatever the proportion of psychoneurotic disability among the sick insured population may be it is certainly considerable, and, with the possible exception of respiratory affections, provides the commonest causes of incapacity. Its presence raises numerous problems—for example, it is interesting to speculate how far the rise in the rate of incapacity among insured persons during the last ten years has been due to increased prevalence of psychoneurotic disability. Among points of immediate practical and medical importance, the following require further investigation and discussion.

1. Proper treatment depends on proper diagnosis. In addition, consideration might be given to the effect on the patient of handling his weekly certificate containing the written cause of his incapacity signed by his insurance practitioner.

"It is of the utmost importance," says Ross,[5] "that no positive physical diagnosis should be given unless the doctor is sure that the lesion will cause the symptoms. If the practitioner were to refuse to give even a tentative diagnosis in the absence of probability, much can be done to prevent incurring and fixing a neurosis. A hasty, ill-considered diagnosis may fix a neurosis for life. . . . There are an enormous number of people suffering from minor illnesses which are called indigestion, gastritis, debility, headache, eye-strain, and many other names, who are suffering from neurosis and whom a comparatively simple therapy would cure."

2. It would seem that reorientation of the medical curriculum is required. The recent report of the British Medical Association on medical education[18] notes that "in the past it has too readily been assumed that failures in medical practice are solely failures on the part of the practitioner; they may very well result from defects in the methods employed in his training." Medical students of to-day receive instruction on the psychoneuroses in the class of psychiatry or mental diseases, but there is little or no teaching of the application of this subject in the general outdoor medical and surgical dispensaries. As a result, students are trained to see only the more serious manifestations demonstrated in a specialized clinic, and may fail to recognize or evaluate the expression of the mental factor in the "ordinary" patient.

3. Official morbidity statistics require to be interpreted with understanding of the latent content of psychoneurosis in such headings as gastritis, rheumatism, anaemia, etc.

4. The part to be played by the general practitioner of the future becomes clearer. At present his function is in a state of transition because of the growth of specialism. The gibe that the "G.P. is only a signpost" has arisen because of the frequency with which a practitioner, in the cities at least, tends to refer his patient for the opinion of an expert. As a result of specialism a patient is apt to be regarded as a "case" of a diseased organ—for example, a heart case, a stomach case, an eye case, and so on. The individual as a whole is neglected, and if he visits too many specialists may be described as "disintegrated." There is evident need for an integrator. When the volume of disablement due to the psychoneuroses is pondered upon, it would seem that this role of integrator, in the first instance at least, can best be played by a general practitioner who will have been trained to recognize the elementary reactions of a person to the difficulties, including the happening of an organic disease, which must be encountered by everyone who passes through the ever-challenging environment of being alive.

Summary

1. Of 1,000 sick insured persons referred for examination the cause of incapacity was considered to be psychoneurotic in 335, or 33.5 per cent.

2. The sexes were affected in almost equal proportion.

3. Among males the incidence of psychoneurotic disability increased from the beginning of industrial life to reach a maximum in the age group 35 to 44, and thereafter declined to a low level at the end of industrial life. The trend in females was similar, but was not statistically significant.

4. The effect of unemployment depended on the sex. In males the incidence of psychoneurotic disability was higher among the unemployed (37 per cent.) than among the employed (28 per cent.). In females the effect of unemployment was either negligible or in the reverse direction.

5. As regards duration of unemployment, for each sex it was found that the group unemployed for less than three months provided a lower incidence of psychoneurotic disability than the employed. With increasing duration of unemployment the incidence increased to reach a high level between six months and two years, and thereafter declined towards the level among the employed.

6. Only one-fifth of the patients disabled by psychoneurosis were certified to be suffering from this group of disorders. The commonest labels were gastritis, debility, anaemia, and rheumatism.

I am deeply indebted to Dr. P. L. McKinlay, statistician to the Department of Health for Scotland, for his co-operation in the arrangement and interpretation of the statistical data; also to my senior colleague, Dr. John Gilmour, for encouragement and suggestions.

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THE INSURANCE MEDICAL SERVICE WEEK BY WEEK

Medical Records of Insured Persons

In a recent interview between representatives of the Ministry of Health and of the Insurance Acts Committee the proposals with regard to medical records which emerged from the decisions of the Annual Panel Conference of Local Medical and Panel Committees were discussed. The most important principle which it was desired to establish was that the medical profession should itself be responsible for the investigation of cases in which the Minister wished action to be taken when a practitioner, after warning, did not improve the standard of his clinical medical records. It was felt that machinery similar to that already available in connexion with cases of alleged lax certification would meet the situation. The next point in order of importance was the assessment of the efficiency with which a practitioner was keeping his records. It was felt that more importance should be attached to clinical notes than to the methodical recording of attendances and visits. The rest of the proposals dealt with technical points which were capable of adjustment.

With regard to the resolution of the Conference expressing the view that the Ministry's assessment as to the value of a practitioner's records should have a bias in favour of the clinical notes as opposed to the minuting of attendances and visits, the Ministry was asked to agree that undue importance should not be attached to a certain laxity in recording actual attendances and visits if a practitioner's clinical notes were of a high standard.

The Ministry's representatives stated that action in the matter of withholding part of an insurance practitioner's remuneration for failure to keep proper records had been confined almost entirely to failure in the matter of recording attendances and visits. Reference was made to the recommendations of the Inter-Departmental Committee on Insurance Medical Records in 1920—namely, that primary

importance should be attached to clinical notes, but that when each patient was seen the attendance should be recorded. Both were important, and the aim should be the encouragement of the standard of record-keeping recommended by the Inter-Departmental Committee. That would be the duty laid upon those who would carry out the investigations under any machinery established for this purpose. The representatives of the Insurance Acts Committee agreed.

The Ministry's representatives agreed with the principle of establishing machinery which would allow of preliminary investigation by Panel Committees of cases of alleged improper keeping of records, and promised to prepare a draft of the proposed amendment of the Medical Benefit Regulations to give effect to the proposal. It was desirable that any such amendment should be included in the new Medical Benefit Consolidated Regulations, which were practically complete and would be issued at an early date.

Dealing with the technical points put forward in Minute 63 of the Annual Conference, the Ministry's representatives raised no objection to the proposals, and promised to give them favourable consideration.

A Question of Partnership

The London Area Allocation Scheme contains the following provision with regard to the limitation of practitioners' lists:

6. (2) A practitioner carrying on practice otherwise than in partnership is not permitted to have more than 2,500 insured persons on his list. In the case of two or more insurance practitioners carrying on practice in partnership the number on the list of any one of such practitioners shall not exceed 3,000, and the average of the numbers on the lists of both or all the partners shall not exceed 2,500.

A case which raises a rather new point has been reported by the Medical Benefit Subcommittee, and appears to show that, in administering the Allocation Scheme, there is a presumption that, if a partner is allowed to have a number of insured persons on his list in excess of the number allowed to a practitioner who is single-handed, there must be reasonably available at all times the services of his colleague in the partnership. In other words, the practice of the two partners must be reasonably within the same area in order to comply with the spirit of the provision in the scheme. The report of the case presented at the last meeting of the London Insurance Committee is as follows:

An insurance practitioner has employed an assistant, with the consent of the committee, since 1931, and for approximately the past three years the brother of the practitioner has been the assistant. The practitioner now reports that his brother has taken a practice in an adjoining area, the distance between the two addresses being stated to be about six miles and on opposite sides of the River Thames, and it is desired that a partnership shall be formed between the two practitioners and recognized by the committee as such. At January 1st, 1935, the number of insured persons included in the list of the practitioner was in excess of the maximum permitted under the Regulations for a practitioner practising otherwise than in partnership or with an assistant. We understand that the assistant is succeeding formally to the other practice on April 1st, 1935, but that since the beginning of the present year he has been serving an introductory period, and has taken little or no part in the work of the London practice. The object of the practitioner in desiring to form a partnership is to enable him to retain on his list a larger number of insured persons than is permitted to a practitioner carrying on practice single-handed. Clause 11 (8) of the Terms of Service for Insurance Practitioners lays it down that in the case of two insurance practitioners practising in partnership treatment may at any time be given by a partner of the practitioner in whose list the patient is included instead of by the practitioner in person, providing that reasonable steps are taken to ensure continuity of treatment, but, unlike the provision relating to assistants, the patient is not entitled to require the personal services of the principal. We are of opinion that it is fundamental that a partnership, so far as it relates to insurance practice, should be a partnership in fact as well as in name, and we cannot find that the mere existence of a partner six miles away on the opposite side of the River Thames could be regarded as sufficient reason for allowing the practitioner to include in his list a number of insured persons in excess of that permitted to a practitioner carrying on practice single-handed. The practitioner has stated that each partner would be willing to help the other, but it would appear that the first duty of each of the practitioners would be to his own practice, and that if the demands on that practice were such as not to permit of assistance being given it obviously would not be available. We have caused the practitioner to be informed that, after consideration of the circumstances in which he proposes to enter into partnership with his brother (as set out in the foregoing report), the committee would be unable to recognize either practitioner as a partner within the meaning of the Terms of Service.

"Own Arrangements"—An Unusual Case

The Medical Benefit Subcommittee of an insurance committee reports as follows:

We have considered and refused applications made by three insured persons for permission to make their own arrangements for receiving treatment from non-insurance practitioners. The circumstances in one of the cases are somewhat peculiar. The insured person originally secured acceptance by an insurance practitioner, and her name remained included in his list until 1924, when he resigned. She then made application for permission to make her own arrangements for receiving treatment from a non-insurance practitioner, and, after considerable correspondence, her application was eventually granted. In 1933 this practitioner sold his practice, and the insured person was afforded an opportunity of applying for a continuance of the arrangement with his successor, but replied that she had not seen the practitioner and had no wish to be in his care, but preferred to be treated by another non-insurance practitioner who resided approximately five miles from her address. This application was refused, and the insured person declined to apply for acceptance by an insurance practitioner. The application with which we have now dealt is for permission to make her own arrangements with the successor referred to above.

British Medical Association

CLINICAL AND SCIENTIFIC PROCEEDINGS

SOUTH SUFFOLK DIVISION

Treatment of Heart Disease

At a meeting of the South Suffolk Division on January 18th, Dr. W. F. ADDEY, physician to the East Suffolk and Ipswich Hospital, delivered a lecture on the treatment of heart disease.

Dr. Addey commenced by considering certain aspects of diagnosis, illustrated by electrocardiograms, in order to indicate their importance in determining the nature of treatment necessary in different cases. He said that it was essential to bear in mind the possibility of an acute condition occurring in the course of chronic morbus cordis—for example, the subacute bacterial endocarditis or endocarditis lenta which attacked old damaged hearts—when classifying cases as acute or chronic. In differentiating between valvular and myocardial disease it was necessary not to overlook cases primarily due to arteriosclerosis or hypertension, and particularly those which were initially associated with chronic renal disease. There were also the cardiac catastrophes, the more important of these being coronary thrombosis and infarction, with the sequel of rupture of a coronary infarct; acute pulmonary oedema due to dissociation of the ventricles; and pulmonary infarction caused by thrombi from the right auricle or ventricle. The value of rest as a therapeutic agent had come into prominence in consequence of the fairly recent recognition of coronary occlusion, in which this treatment was so admittedly important. In rheumatic endocarditis the rest must be adequate—namely, from three to six months in duration—if the damaged valves and myocardium were to be allowed time to be repaired. Dr. Addey did not subscribe to the view that mitral stenosis was thus most likely to occur. It was most difficult to advise patients suffering from valvular disease, since so much depended on the state of the myocardium, and symptoms of myocardial affections were so slight, comprising often only slight pain in the chest, a little shortness of breath, and an unusual tendency to fatigue. Auricular fibrillation, or, less commonly, auricular flutter, was often the first indication of the existence of a myo-

cardial degeneration ; it was not necessarily followed, at any rate for years, by failure ; it was intermittent, and might be surprisingly transient ; it often occurred in the thyrotoxic state ; and it required treatment when not transient. Gross irregularity of the heart's action, especially associated with valvular disease and more particularly mitral stenosis as well as with oedema, congestion, and enlargement of the liver, was frequently described as congestive failure. Rest was the first essential in the treatment, and for a time might be effective, but could not result in cure. As regards drugs in this condition, it was impossible to overrate the value of digitalis, which stimulated the vagus, "slowing the pace-maker at the S-A node and shortening the period of auricular muscles directly depressed the conducting tissues, and acted directly on the muscle fibres, causing an increase in the sense of systole and prolonging the refractory period." Large doses were needed to gain an effect, and this should be brought about as quickly as possible. About 5 drachms of the tincture had to be accumulated in the body before the effect was produced, and the drug was excreted at the approximate rate of 20 minims a day. A man weighing 10 stone would thus require about 6 drachms of the equivalent of the tincture. Dr. Addey said that he limited himself to a standardized tincture and Nativelle's granules of digitaline. He had adopted the massive-dose method for the former, and usually gave according to the patient's weight 1½ drachms of the tincture daily for one dose at twenty-four-hourly intervals. He continued this for two or three days, then halved the dose, and later gradually further diminished it. An effect might be manifest even in twenty-four hours, and usually there was obvious improvement by the end of the third day. Since six hours were required for the absorption of the drug by the stomach, it should not be administered, whatever the dose might be, more frequently than at such an interval. Nativelle's granules of 1/240 grain were employed ; these were said to be the equivalent of 15 minims of the tincture, but Dr. Addey considered their strength to be higher than that. He gave, therefore, one granule every six hours for the first and second days ; eight-hourly on the third and fourth days ; and twelve-hourly subsequently. Careful watching was required, for it was an extremely potent drug, and frequently at the end of twenty-four hours the pulse had slowed to a remarkable extent. A certain degree of heart-block resulted, and this must not be pushed too far, lest extrasystoles be provoked ; a common result was "coupling." When this occurred it was an indication for the discontinuance of the drug. Vomiting had also to be guarded against, and diminution of the urinary excretion was evidence of a toxic effect. If these measures were successful the dropsy disappeared and the heart's action became regular ; then, for an indefinite period, the patient must be given a daily maintenance dose of 15 minims of the tincture or one Nativelle granule of the strength of 1/240 or even 1/500 grain to avert the inevitable failure for as long as possible. The patient must be taught to avoid undue fatigue and strain, for, while it was probably impossible to strain a healthy heart, the case was quite different with a damaged and diseased one. To get an extremely rapid effect, nothing was so good as strophanthin intravenously. It was useful in cases of delirium cordis with the patient in a critical condition, and Dr. Addey employed it in the form of ouabain, giving 1/240 grain intravenously. The drug was, however, very toxic, and at times not devoid of danger ; it could not be repeated for twenty-four hours, and as a rule, if the patient responded, two or three injections were sufficient in an immediate crisis. If diuresis did not follow the exhibition of digitalis, other methods must be adopted. If auricular flutter was the dominant feature a return of the pulse to normal was aimed at, and in most cases obtained. Middle-aged and elderly patients with myocardial disease who did not respond to digitalis would frequently do so to quinidine, the risks of which drug were not great if it was used with caution. The idiosyncrasy of the patient to the drug should first be tested, and then for three days 0.2 gram should be given at two-hourly intervals from 9 a.m. to 5 p.m. The drug would have achieved its effect in three to five days if it was going to act at all. When digitalis failed to relieve congestive failure, salyrgan might be tried intravenously or intramuscularly in doses of 1 c.cm. two or three times a week. It was not wise to give it too frequently. The effect was enhanced by the sucking of ammonium chloride lozenges, and a most remarkable diuresis frequently followed. If these measures failed to remove the waterlogging from the tissues, Southey's tubes were the best of the mechanical methods. To secure sleep, often a very difficult matter, chloramide in doses of 25 to 30 grains could be given indefinitely with perfect safety. Dr. Addey did not use the drugs of the barbitone group, but thought opium most valuable at times, although it might occasionally be dangerous. Venesection, like Southey's tubes, had rather fallen into disrepute undeservedly in the latter part of the nineteenth century, but was now commendably in favour again. If performed with a needle and a vacuum bottle, it was a very simple procedure, resulting in very little disturbance and bringing about striking results. Coramine as an emergency drug had proved of value, but oxygen was useless unless there was a high degree of congestion of the lungs. Coronary thrombosis might occur at any age, and a cardiogram was of diagnostic assistance. Adequate rest must be secured, if the patient did not die at once ; he must stay in bed for at least six weeks, and every form of fatigue be averted. The danger run the whole time was that of infarction. Recurrence was not so common, but a secondary thrombosis might occur. Morphine was the only therapeutic agent of any value, and the fact that the frequently agonising pain was not relieved by the first or even by the second injection of 1/4 grain was almost diagnostic. It was quite usual to have to give a dose as high as 3/4 grain. Amyl nitrite was of no value. If the patient could be tided over the first forty-eight hours there was hope of recovery. Acute pulmonary oedema must also be treated with morphine, usually advantageously combined with 1/100 or even 1/50 grain of atropine. One injection usually sufficed, and the results were exceedingly striking, the cessation of the symptoms and the return of well-being proving as dramatic as the onset of the attack.

GRANTS BY THE DENTAL BOARD

At its February meeting (in committee of the whole Board) the Dental Board agreed to offer to the University of Liverpool a grant of £500 a year for five years, from October next, towards the salaries of a full-time demonstrator in clinical and operative dental surgery and of a half-time demonstrator in orthodontics. The grant is subject to the conditions that a minimum salary of £550 a year be paid to the full-time demonstrator and of £275 to the half-time demonstrator, the Board to be kept informed of the names and qualifications of the persons holding the appointments, and the dental treatment at any hospital connected with the school to be under the supervision of an efficient almoner's department so as to secure that such treatment, apart from that which may be necessary for the proper training of students, shall be restricted to necessitous persons. The grant is a renewal of that made by the Board in 1930 in pursuance of the policy of assisting dental schools to attract the regular services of young dental practitioners prepared to devote a considerable proportion of their time to teaching work. A report was made by a member of the Board who had visited the dental school at Liverpool and seen the work of the two demonstrators, and it was believed that the Board's grant had assisted in definitely raising the standard of teaching in both departments, and that, without the aid of the Board, the university would not be able, at the present time, to continue the two appointments.

It was reported that the University of St. Andrews had accepted the grant offered by the Board of £350 a year for two years towards the salaries of lecturers in dental subjects, and the University of Sheffield of £500 a year for five years towards the salary of a whole-time professor in dental surgery, in each case on certain specified conditions. The University of Manchester had appointed a whole-time director of the prosthetics department in the dental hospital and lecturer in dental prosthetics in the University, with the aid of the grant of £250 a year offered by the Board.

British Medical Association

CURRENT NOTES

Life Insurance without Medical Examination

Members of the Association not infrequently write saying that they have been asked to give information about the previous health of patients who have been accepted for life insurance without medical examination and who have died shortly afterwards. The object of an insurance company in making such an inquiry is to enable it to decide, having regard to the replies given by the proposer when the contract was effected, whether or not a case exists for payment under the terms of the policy. Thus the company would seem in these cases to be looking to the doctor "to pull the chestnuts out of the fire." It is no part of the practitioner's duty to give information to an insurance company in these circumstances. Whether or not a fee is offered is beside the point. In all such cases the practitioner should refuse to give information without the written consent and instructions of the relatives of the deceased.

Medical Posts Abroad

The Head Office of the Association has at its disposal much information, received from various sources, such as may be very useful to those proposing to accept medical appointments abroad. Members are cordially invited to apply to the Medical Secretary for any information available in respect of oversea appointments in which they are specially interested.

Correspondence

MANIPULATIVE TREATMENT

SIR,—I am glad to see in the *Supplement* of March 9th an article on "Osteopathic Theory and Practice," by Dr. N. J. Macdonald. It is pleasant to think that one can talk and write on this subject without being shunned by his medical brethren, as was the custom when I first introduced the topic a quarter of a century ago. On September 3rd, 1910, I wrote an article on "Mechanotherapy in Disease, with special reference to Osteopathy," and I am pleased to add that the Editor of the *British Medical Journal* very kindly congratulated me on my courage in having ventured so far as America to study the system.

From that time I have not ceased to study and practise the subject, with the result that I have often been able to benefit a patient when no other method was of any avail. This was at a time when the prevention and cure of disease by manipulation was to a large extent left to the layman, and the medical man who dabbled in it was too often relegated to the status of a quack.

To-day more generous views prevail, and the qualified practitioner of medicine displays less reverence, though more care, for bones and joints than he was wont to do. He is now more anxious to copy the methods of Dr. Wharton Hood, who practised the manipulative method long before osteopathy was invented.

In 1910, in the *British Medical Journal*, I pleaded hard for the admission of this new form of scientific bone-setting among the recognized methods of treatment practised by the medical profession, but until recent years little attention was paid to it. Now, at long last, I am pleased to note that medical men are not only practising the art, but one or two are actually writing to encourage others to try it.

If anyone would like to know of a short, succinct dissertation on the theory and practice of osteopathy he will find it in a book entitled *Ideal Health*, published by Messrs. John Wright and Sons of Bristol.—I am, etc.,

Birmingham, March 11th. ALEXANDER BRYCE.

Naval and Military Appointments

ROYAL NAVAL MEDICAL SERVICE

Surgeon Rear-Admiral G. L. Buckeridge, O.B.E., to the *Victory*, for Haslar Hospital.

Surgeon Lieutenant Commanders E. C. Davis to the *Ajax*; S. G. Weldon to the *Queen Elizabeth*.

The seniority of Surgeon Lieutenant E. L. Littler has been antedated to August 1st, 1932.

Surgeon Lieutenants J. W. Oliver to the *Pembroke*; V. J. Fielding to the *Rochester*; P. N. Walker-Taylor to the *Carlisle*; W. Greaves to the *President*, for course; J. L. S. Coulter to the *Pembroke*, for Royal Naval Hospital, Chatham; R. M. Kirkwood to the *Dorsetshire*, on recommissioning.

ROYAL NAVAL VOLUNTEER RESERVE

Probationary Surgeon Sublieutenant P. M. Inman to be Surgeon Sublieutenant, with original seniority February 19th, 1934.

ROYAL AIR FORCE MEDICAL SERVICE

Air Commodore A. W. Iredell has been appointed Director of Medical Services, Air Ministry, vice Air Vice-Marshal J. McIntyre, C.B., M.C., who has been placed on the retired list at his own request.

Group Captain T. J. Kelly, M.C., to Princess Mary's R.A.F. Hospital, Halton, for duty as Commanding Officer, vice Group Captain F. C. Cowtan.

Squadron Leaders F. E. Johnson to Station Headquarters, Hendon, for duty as Medical Officer; T. J. D. Atteridge to Headquarters, Coastal Area, Lee-on-the-Solent, for duty as Deputy Principal Medical Officer, vice Squadron Leader T. J. X. Canton; W. E. Barnes to R.A.F. Hospital, Cranwell, for duty as Medical Officer.

Flight Lieutenant J. A. Kersley is granted a permanent commission in this rank.

Flight Lieutenant R. L. Raymond relinquishes his short service commission on transfer to the Indian Medical Service. (Substituted for the notification in the *London Gazette* of January 29th, 1935.)

Flight Lieutenants J. Kemp to Princess Mary's R.A.F. Hospital, Halton; J. McGovern to Aircraft Depot, Iraq, Hinaidi; O. M. Fraser to No. 3 Armament Training Camp, Sutton Bridge.

Flying Officer W. P. Stamm to be Flight Lieutenant, with seniority May 1st, 1934.

Flying Officers H. Bannerman to No. 47 (B) Squadron, Khartum, Egypt; G. H. Morley to No. 1 Armament Training Camp, Catfoss.

TERRITORIAL ARMY

ROYAL ARMY MEDICAL CORPS

Major G. E. Lloyd, M.C., having attained the age limit, retires and retains his rank, with permission to wear the prescribed uniform.

Captain J. O. Moffat to be Major.

Lieutenants H. W. E. Dickey and H. E. Blake to be Captains.

F. V. Allen, P. Brookes, and W. D. F. Lytle (late Officer Cadet, University of London Contingent, Medical Unit, Senior Division, O.T.C.) to be Lieutenants.

INDIAN MEDICAL SERVICE

Lieut.-Cols. W. H. Hamilton, C.I.E., C.B., D.S.O., and F. F. S. Smith to be Brevet Colonels.

Lieut.-Col. C. E. Palmer, officiating Inspector-General of Civil Hospitals, Assam, has been duly nominated by the Government of Assam under Clause (*a*) of Subsection (1) of Section 3 of the Indian Medical Council Act, 1933 (XXVII of 1933), as a member of the Medical Council of India, vice Colonel J. P. Cameron, C.S.I., C.I.E., resigned.

Majors S. C. Contractor and S. D. Sondhi, M.C., to be Lieutenant-Colonels.

Captains N. J. U. Mather, A. A. Pullar, F. R. Cawthorn, L. Feinhols, W. B. Stiver, J. G. Stonham, F. W. Allinson, F. V. Stonham, J. M. Mathew, G. F. Harris, and J. J. Barton have been confirmed in their probationary appointments.

Lieutenant M. M. D. Chughtai has resigned his temporary commission.

G. P. Charlewood to be Lieutenant (on probation), with seniority December 17th, 1933.

COLONIAL MEDICAL SERVICES

The following appointments are announced: J. K. Monro, M.D., F.R.C.S., Professor of Surgery, King Edward VII College of Medicine, Singapore, Straits Settlements; H. M. Johnston, M.B., Ch.B., Medical Officer of Health, Jamaica; G. R. Baxter, M.D., Ch.B., D.P.H., Medical Officer of Health, Gambia; W. E. S. Merrett, B.M., B.Ch., Pathologist, Nigeria; W. J. E. Phillips, M.B., B.S., District Medical Officer, Cyprus; W. H. Smith, M.B., Ch.B., D.P.H., Medical Officer, Tanganyika; B. Spearman, O.B.E., M.B., B.Ch., Senior Medical Officer, Grenada; E. S. Godlieb, L.M.S., L.R.C.P. and S., L.R.F.P. and S., Provincial Surgeon, Ceylon; W. S. Ratnavale, M.R.C.S., L.R.C.P., Medical Superintendent, General Hospital, Colombo, Ceylon; A. E. Slinger, M.R.C.S., L.R.C.P., District Medical Officer, Grenada.

Association Notices

SIR CHARLES HASTINGS CLINICAL PRIZE

The Sir Charles Hastings Clinical Prize, which consists of a certificate and a money award of fifty guineas, is again open for competition in respect of 1936. The following are the regulations governing the award:

1. The prize is established by the Council of the British Medical Association for the promotion of systematic observation, research, and record in general practice; it includes a money award of the value of fifty guineas.
2. Any member of the Association who is engaged in general practice is eligible to compete for the prize.
3. The work submitted must include personal observations and experiences collected by the candidate in general practice, and a high order of excellence will be required. If no essay entered is of sufficient merit no award will be made.
4. Essays, or whatever form the candidate desires his work to take, must be sent to the British Medical Association House, Tavistock Square, London, W.C.1, not later than December 31st, 1935.
5. No study or essay that has been published in the medical press or elsewhere will be considered eligible for the prize, and a contribution offered in one year cannot be accepted in any subsequent year unless it includes evidence of further work.
6. If any question arises in reference to the eligibility of the candidate, or the admissibility of his or her essay, the decision of the Council on any such point shall be final.
7. Each essay must be typewritten or printed, must be distinguished by a motto, and must be accompanied by a sealed envelope marked with the same motto, and enclosing the candidate's name and address.
8. The writer of the essay to whom the prize is awarded may, on the initiative of the Science Committee, be requested to prepare a paper on the subject for publication in the *British Medical Journal*, or for presentation to the appropriate Section of the Annual Meeting of the Association.
9. Inquiries relative to the prize should be addressed to the Medical Secretary.

BRANCH AND DIVISION MEETINGS TO BE HELD

BORDER COUNTIES BRANCH.—At County and Station Hotel, Carlisle, Friday, March 29th, 3.30 p.m. Address by Sir Wilfred Grenfell on his work in Labrador. Non-members invited, and members are asked to bring their friends.

CAMBRIDGE AND HUNTINGDON BRANCH: PETERBOROUGH DIVISION.—At Great Northern Hotel, Peterborough, Wednesday, March 20th, 3.15 p.m. Dr. Robert Forbes (Deputy Medical Secretary): "The Work of the Association."

DORSET AND WEST HANTS BRANCH: WEST DORSET DIVISION.—At Weymouth and District Hospital, Thursday, March 21st. 3.30 p.m., Cases. 4.45 p.m., Dr. Marie Stopes: "Some Technical Aspects of Contraception." To be followed by a discussion.

EAST YORKSHIRE BRANCH.—At Quern House, Park Street, Hull, Friday, March 22nd, 8.15 p.m. Discussion: "Public Health Service and the General Practitioner." To be opened by Dr. N. Gebbie and Dr. Morton Stewart.

ESSEX BRANCH: MID-ESSEX DIVISION.—At Brentwood and District Hospital, Brentwood, Wednesday, March 27th, 3 p.m. Mr. John Hosford: "Minor Rectal Maladies."

KENT BRANCH: BROMLEY DIVISION.—Joint meeting with Bromley Medical Society at White Hart Hotel, Bromley, Wednesday, March 20th, 8.45 p.m. Dr. R. J. Cann: "Pain Round the Ear" Preceded by supper at 7.45 p.m.

KENT BRANCH: DARTFORD DIVISION.—At Guardians Offices, 37, West Hill, Dartford, Friday, March 22nd, 9 p.m. Dr. Charles Hill (Assistant Medical Secretary): "Effects of Recent Legislation on Medical Practice." Non-members welcome.

METROPOLITAN COUNTIES BRANCH: CITY DIVISION.—At Metropolitan Hospital, Kingsland Road, E., Friday, March 15th, 4.30 p.m. Mr. K. J. Acton Davis: Orthopaedic cases.

METROPOLITAN COUNTIES BRANCH: KENSINGTON DIVISION.—At London Lock Hospital, Harrow Road, W., Friday, March 15th, 8.45 p.m. Mr. V. B. Green-Armytage: "Influence of Diet on Child-bearing."

METROPOLITAN COUNTIES BRANCH: LEWISHAM DIVISION.—At Lewisham Hospital, Tuesday, March 19th, 3.45 p.m. Clinical meeting.

METROPOLITAN COUNTIES BRANCH: SOUTH-WEST ESSEX DIVISION.—At Connaught Hospital, Orford Road, Walthamstow, Tuesday, March 19th, 9.15 p.m. Discussion *re* transfer of the South-West Essex Division to the Essex Branch.

METROPOLITAN COUNTIES BRANCH: STRATFORD DIVISION.—At Educational Offices, Stratford, E., Tuesday, March 19th, 9.15 p.m. Dr. H. Morlock: "Chest Diseases in General Practice."

METROPOLITAN COUNTIES BRANCH: WILLESDEN DIVISION.—At Willesden General Hospital, Wednesday, March 20th, 9 p.m. Film: "The Science and Art of Obstetrics." Discussion: "London Public Medical Service." To be opened by Mr. Arnold L. Walker.

MIDLAND BRANCH: LEICESTER AND RUTLAND DIVISION.—At Medical Club, East Bond Street, Leicester, Friday, March 22nd, 8.45 p.m. Election of Representatives; consideration of proposal to adopt a resolution regarding salaries of whole-time public health medical officers under a local authority; and conditions of service of district medical officers.

NORTH OF ENGLAND BRANCH.—At Royal Victoria Infirmary, Newcastle-upon-Tyne, Thursday, March 21st, 2.30 p.m. Scientific meeting.

NORTH OF ENGLAND BRANCH: BISHOP AUCKLAND DIVISION.—At King's Restaurant, Bishop Auckland, Friday, March 22nd, 8 p.m. Annual dinner.

NORTH OF ENGLAND BRANCH: NORTH NORTHUMBERLAND DIVISION.—At Blue Bell Hotel, Belford, Tuesday, March 19th, 3 p.m. Mr. Frank Stabler: "Vaginal Discharges."

NORTHERN IRELAND BRANCH: TYRONE DIVISION.—At Tyrone County Hospital, Thursday, March 21st, 4.30 p.m. Annual General Meeting; election of officers.

SOUTH WALES AND MONMOUTHSHIRE BRANCH: SWANSEA DIVISION.—Combined meeting with West Glamorgan Branch of Pharmaceutical Society of Great Britain at Hotel Metropole, Swansea, Wednesday, March 20th, 8 p.m. Mr. Harry Berry: "The *British Pharmaceutical Codex, 1934*." Preceded by supper.

SOUTH-WESTERN BRANCH.—At Liskeard, Wednesday, March 27th, 3 p.m. Intermediate meeting.

SOUTH-WESTERN BRANCH: PLYMOUTH DIVISION.—At Goodbody's Café, Plymouth, Wednesday, March 20th, 7.30 p.m., supper. 8.30 p.m., Dr. R. J. Percy Thomas: "Country Pursuits in Local Surroundings."

STAFFORDSHIRE BRANCH: NORTH STAFFORDSHIRE DIVISION.—At North Staffordshire Royal Infirmary, Stoke-on-Trent, Thursday, March 21st, 3.30 p.m. Dr. John Parkinson: "Hypertension."

SUSSEX BRANCH: WEST SUSSEX DIVISION.—At Burlington Hotel, Worthing, Wednesday, March 20th, 6 p.m. Professor Millais Culpin: "Examination of the Nervous Patient." Dinner at 7.30 p.m.

YORKSHIRE BRANCH: GOOLE AND SELBY DIVISION.—At Londesborough Arms Hotel, Selby, Tuesday, March 19th, 7.45 p.m., supper 8.30 p.m., Dr. N. Macleod (York): "The Mental Patient in General Practice."

YORKSHIRE BRANCH: WAKEFIELD, PONTEFRACT, AND CASTLEFORD DIVISION.—At Stratford Arms Hotel, Wakefield, Thursday, March 21st. Dr. C. J. Thomas: "The Early Stages of Mental Disorders." Preceded by dinner at 7.45 p.m.

TABLE OF OFFICIAL DATES

March 15, Fri.	Branch Reports for 1934 due by this date.
March 23, Sat.	Nomination Papers available (on application at Head Office) for election of (i) 24 Members of Council by grouped Branches in the British Isles; (ii) 2 Public Health Service Members of Council and 4 representatives of Public Health Service in Representative Body.
April 3, Wed.	Council.
April 13, Sat.	Last day for receipt at Head Office of Clinical Papers by Medical Students and Newly Qualified Practitioners.
April 20, Sat.	Publication of Annual Report of Council in *B.M.J. Supplement*.
April 27, Sat.	Last day for receipt at Head Office of Nominations: (i) by a Division or by not less than 3 Members, for election of 24 Members of Council by grouped Branches in the British Isles; (ii) for election of 2 Public Health Service Members of Council and 4 representatives of Public Health Service in Representative Body.
May 11, Sat.	Publication in *B.M.J. Supplement* of list of Nominations for election of (i) 24 Members of Council by grouped Branches in the British Isles; (ii) 2 Public Health Service Members of Council and 4 representatives of Public Health Service in Representative Body.
	Voting Papers posted from Head Office where there are contests in above elections.
	Applications for Scholarships and Grants must be received at Head Office by this date.

May 13, Mon.	Motions by Divisions and Branches for A.R.M. Agenda on matters of which two months' notice must be given must be received at Head Office by this date.
May 18, Sat.	Publication in *B.M.J. Supplement* of Motions and Amendments by Divisions and Branches for A.R.M. on matters of which two months' notice must be given. Representatives and Deputy Representatives must be elected by this date. Last day for receipt at Head Office of Voting Papers for election, where there are contests, of (i) 24 Members of Council by grouped Branches in the British Isles; (ii) 2 Public Health Service Members of Council and 4 representatives of Public Health Service in Representative Body.
June 1, Sat.	Publication in *B.M.J. Supplement* of result of election of Members of Council by grouped Branches, and result of election of Members of Council and representatives in Representative Body by Public Health Service members. Nomination Papers available (on application at Head Office) for election of 12 Members of Council by grouped Representatives (British Isles).
June 5, Wed.	Council.
June 6, Thurs.	Names of Representatives and Deputy Representatives must be received at Head Office by this date.
June 22, Sat.	Publication of Supplementary Report of Council in *B.M.J. Supplement*.
July 3, Wed.	Other items for inclusion in A.R.M. printed Agenda must be received at Head Office by this date.
July 19, Fri.	Annual Representative Meeting, London.
July 20, Sat.	Annual Representative Meeting, London.
July 22, Mon.	Annual Representative Meeting, London. Council.
July 23, Tues.	Annual Representative Meeting; Annual (Business) General Meeting; London. Council.
July 24, Wed.	Conference of Honorary Secretaries, London.
Sept. 10, Tues.	Adjourned Annual General Meeting; President's Address; Melbourne.
Sept. 11, Wed.	Meetings of Sections, etc., Melbourne.
Sept. 12, Thurs.	Meetings of Sections, etc., Melbourne. Annual Dinner of the Association, Melbourne.
Sept. 13, Fri.	Meetings of Sections, etc., Melbourne.

DIARY OF SOCIETIES AND LECTURES

ROYAL COLLEGE OF PHYSICIANS OF LONDON, Pall Mall East, S.W.—*Tues.* and *Thurs.*, 5 p.m., Lumleian Lectures by Dr. J. Shaw Bolton: Evolution of Mind.

ROYAL SOCIETY OF MEDICINE

General Meeting of Fellows, Tues., 5.30 p.m. Ballot for Election to the Fellowship.

Section of Pathology.—Tues., 8.30 p.m. Annual General Meeting. Election of Officers and Council for 1935–6. Communications by A. J. B. Goldsmith, E. N. Allott, A. Felix, and R. Hare. Demonstration by J. N. Alston.

Section of Dermatology.—Thurs., 5 p.m. (Cases at 4 p.m.) Cases by Mr. H. Corsi, Dr. H. W. Barber, and Dr. L. Forman.

Section of Neurology.—Thurs., 8.30 p.m. Short Papers by Dr. D. Denny-Brown and Dr. J. Pennybacker, Dr. J. St. C. Elkington, and Dr. W. Mayer-Gross.

Section of Disease in Children.—Fri., 5 p.m. (Cases at 4.30 p.m.) Cases by Dr. G. G. Penman, Dr. J. D. Rolleston, Dr. W. Sheldon, Dr. R. H. Bailey (for Dr. Donald Paterson), Dr. David Haler; and Brain from a Child of 21 days showing Marked Dysencephalorrhagia.

Section of Epidemiology and State Medicine.—Fri., 8 p.m. Paper by Dr. Evelyn Holmes: A New Approach to the Epidemiology of Tuberculosis.

BRITISH RED CROSS SOCIETY, 9, Chesham Street, S.W.—*Wed.* and *Fri.*, 5.30 p.m. Lectures on First Aid in Chemical Warfare.

CHELSEA CLINICAL SOCIETY.—At Hotel Rembrandt, Thurloe Place, S.W., *Tues.* Discussion: Sterilization of the Unfit and the Race. Openers, Dr. R. D. Gillespie and Dr. C. P. Blacker. Preceded by dinner at 7.30 p.m.

EUGENICS SOCIETY.—At Linnean Society's Rooms, Burlington House, Piccadilly, W., *Tues.*, 5.15 p.m. Dr. Francis Grundy: Genetics of Amentia—a Territorial Survey in a Rural Area.

HUNTERIAN SOCIETY.—At Simpson's Restaurant, 76, Cheapside, E.C., *Mon.*, 7.15 p.m., Dinner. 8.30 p.m., Discussion on Itching. To be opened by Dr. Thomson Brown, Dr. G. Bellingham Smith, and Mr. Ernest Miles.

ROYAL SOCIETY OF TROPICAL MEDICINE AND HYGIENE.—*Thurs.*, 8.15 p.m., Laboratory Meeting at Royal Army Medical College, Millbank, S.W. Demonstrations.

British Medical Association

OFFICES, BRITISH MEDICAL ASSOCIATION HOUSE
TAVISTOCK SQUARE, W.C.1

Departments

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Telephone numbers of British Medical Association and British Medical Journal, Euston 2111 (internal exchange, four lines).

SCOTTISH MEDICAL SECRETARY: 7, Drumsheugh Gardens, Edinburgh. (Telegrams: Associate, Edinburgh. Tel.: 24361 Edinburgh.)
IRISH MEDICAL SECRETARY: 18, Kildare Street, Dublin. (Telegrams: Bacillus, Dublin. Tel.: 62550 Dublin.)

Diary of Central Meetings

MARCH

21 Thurs. Relation of Alcohol to Road Accidents Subcommittee, 4 p.m. Consultants and Specialists Group Committee, 2.15 p.m.
22 Fri. Physical Education Committee, Organization Subcommittee, 2.30 p.m.
26 Tues. Physical Education Committee, Education Subcommittee, 2.30 p.m.
29 Fri. Consulting Pathologists Group Committee, 3.45 p.m.

APRIL

1 Mon. Training of Teachers Subcommittee, 2.30 p.m.
2 Tues. Physical Education Committee, Games Subcommittee, 2.30 p.m.
3 Wed. **Council**, 10 a.m.
4 Thurs. Physical Education Committee, Foreign Subcommittee, 3 p.m.
5 Fri. Spa Practitioners Group Committee, 2.30 p.m.
24 Wed. Grants Subcommittee, 2.15 p.m.
25 Thurs. Medical Students and Newly Qualified Practitioners Subcommittee, 3.45 p.m.

POST-GRADUATE COURSES AND LECTURES

FELLOWSHIP OF MEDICINE AND POST-GRADUATE MEDICAL ASSOCIATION, 1, Wimpole Street, W.—*Royal National Orthopaedic Hospital*, 234, Great Portland Street, W.: All-day Course in Orthopaedics. *Brompton Hospital*, S.W.: Tues., Wed., Thurs., and Fri., 5 p.m. to 6.30 p.m., M.R.C.P. Course in Chest Diseases; all day, Sat. and Sun., Course in Chest Diseases. *National Temperance Hospital*, Hampstead Road, N.W.: All-day Course in Clinical Medicine and Surgery. *Panel of Teachers:* Individual clinics in various branches of medicine and surgery are available daily. Courses, clinics, etc., arranged by the Fellowship are open only to members and associates.

CANCER HOSPITAL (FREE), Fulham Road, S.W.—*Thurs.*, 4 p.m., Mr. Douglas H. MacLeod, Diagnosis and Treatment of Precancerous Conditions of the Female Pelvis.

CENTRAL LONDON THROAT, NOSE AND EAR HOSPITAL, Gray's Inn Road, W.C.—*Fri.*, 4 p.m., Mr. N. Asherson, Treatment of Chronic Otorrhoea.

HAMPSTEAD GENERAL AND NORTH-WEST LONDON HOSPITAL.—*Wed.*, 4 p.m., Dr. Thomas Marlin, Practical Work in Manipulative Treatment.

HOSPITAL FOR SICK CHILDREN, Great Ormond Street, W.C.—*Mon.*, 12 noon, Laboratory Demonstration, Dr. W. W. Payne, Treatment of Diabetes. *Wed.*, 2 p.m., Lecture, Dr. H. Sington, Ethyl Chloride for Short Operations in Children. *Thurs.*, 12 noon, Laboratory Demonstration, Dr. A. Signy, Examination of the Urine. *Fri.*, 12 noon, Lecture, Dr. D. N. Nabarro, Dysenteric Infection in Children. Out-patient Clinics, mornings, 10 a.m. to 12 noon. Ward Visits, afternoons, 2 p.m. to 3.30 p.m. (except Wed.).

KING'S COLLEGE HOSPITAL MEDICAL SCHOOL.—*Thurs.*, 9 p.m., Dr. E. Mapother, Psychiatric Grounds for Abortion and Sterilization.

NATIONAL HOSPITAL, Queen Square, W.C.—*Mon.* to *Fri.*, 2 p.m., Out-patient Clinics. *Mon.*, 3.30 p.m., Dr. C. M. Hinds Howell, Acute Encephalitis and Encephalomyelitis. *Tues.*, 3.30 p.m., Mr. Julian Taylor, Injuries of the Brain. *Thurs.*, 3.30 p.m., Dr. George Riddoch, Cerebral Abscess and Meningitis. *Fri.*, 3.30 p.m., Dr. Hugh Davies, Radiology in Disease of the Nervous System.

SOUTH-WEST LONDON POST-GRADUATE ASSOCIATION, St. James's Hospital, Ouseley Road, S.W.—*Wed.*, 4 p.m., Mr. Cecil Joll, Some Problems in the Diagnosis and Treatment of Diseases of the Thyroid Gland.

UNIVERSITY COLLEGE, Gower Street, W.C.—*Mon.*, 5 p.m., Dr. R. H. Ing, Chemical Structure of Drugs in Relation to their Physiological Action.

WEST LONDON HOSPITAL POST-GRADUATE COLLEGE, Hammersmith, W.—*Daily*, 2 p.m., Operations, Medical and Surgical Clinics. *Mon.*, 10 a.m., Skin Clinic, Medical Wards; 2 p.m., Surgical and Gynaecological Wards, Eye and Gynaecological Clinics; 4.15 p.m., Lecture, Mr. Green-Armytage, Contraception. *Tues.*, 10 a.m., Medical Wards; 11 a.m., Surgical Wards; 2 p.m., Throat Clinic. *Wed.*, 10 a.m., Medical Wards, Children's Wards

and Clinic; 2 p.m., Eye Clinic. *Thurs.*, 10 a.m., Neurological and Gynaecological Clinics; 12 noon, Fracture Clinic; 2 p.m., Eye and Genito-urinary Clinics. *Fri.*, 10 a.m., Skin Clinic; 12 noon, Lecture on Treatment; 2 p.m., Throat Clinic; 4.15 p.m., Lecture, Mr. Vlasto, Dysphagia. *Sat.*, 10 a.m., Medical Wards, Children's and Surgical Clinics. The lectures at 4.15 p.m. are open to all medical practitioners without fee.

GLASGOW POST-GRADUATE MEDICAL ASSOCIATION.—At Ophthalmic Institution: *Wed.*, 4.15 p.m., Dr. A. Garrow, Eye Cases.

LEEDS POST-GRADUATE CLINICAL DEMONSTRATIONS.—At Leeds General Infirmary: *Tues.*, 3.30 p.m., Dr. Moll, Tumours of the Lung (with cases).

LEEDS PUBLIC DISPENSARY AND HOSPITAL POST-GRADUATE COURSE.—*Wed.*, 4 p.m., Mr. A. D. Sharp; Treatment of Nasal Sinus Infection.

LIVERPOOL UNIVERSITY CLINICAL SCHOOL ANTE-NATAL CLINICS.—Royal Infirmary: *Mon.* and *Thurs.*, 10.30 a.m. Maternity Hospital: *Mon., Tues., Wed., Thurs.*, and *Fri.*, 11.30 a.m.

MANCHESTER: ANCOATS HOSPITAL—*Thurs.*, 4.15 p.m., Dr. A. Renshaw, Various Forms of Asphyxia.

MANCHESTER ROYAL INFIRMARY.—*Tues.*, 4.15 p.m., Dr. E. W. Twining, Radiology of the Chest. *Fri.*, 4.15 p.m., Mr. W. H. Hey, Demonstration of Surgical Cases.

NEWCASTLE GENERAL HOSPITAL.—*Sun.*, 10.30 a.m., Mr. W. E. M. Wardill.

SALFORD MUNICIPAL CLINIC (V.D.).—*Mon.*, 3.30 p.m., Dr. Burke, Gonorrhoea, Male, Chronic. *Thurs.*, 3.30 p.m., Dr. Burke, Gonorrhoea, Female.

VACANCIES

ASHTON-UNDER LYNE: DISTRICT INFIRMARY.—(1) R.S.O. (male). (2) H.S.

BELGRAVE HOSPITAL FOR CHILDREN, Clapham Road, S.W.—(1) Two H.P. (2) H.S. Males.

BIRMINGHAM CITY.—Whole-time J.M.O. (male) at Selly Oak Hospital.

BOLTON ROYAL INFIRMARY.—Hon. Aural S.

BRADFORD CHILDREN'S HOSPITAL.—(1) H.S. (2) H.P.

BRIDGE OF WEIR SANATORIUM AND ALLIED INSTITUTIONS.—(1) R.M.O. (male, unmarried). (2) R.M.O. (female, unmarried).

BRISTOL: COSSHAM MEMORIAL HOSPITAL.—Second R.M.O. (male).

CARDIFF: WELSH NATIONAL SCHOOL OF MEDICINE.—Full-time (*a*) Assistant Lecturer and (*b*) Demonstrator in the Department of Pathology and Bacteriology.

CHELTENHAM GENERAL AND EYE HOSPITALS.—H.S.

CITY OF LONDON HOSPITAL FOR DISEASES OF THE HEART AND LUNGS, Victoria Park, E.—(1) H.P. (male). (2) Radiologist.

COVENTRY AND WARWICKSHIRE HOSPITAL.—(1) R.H.P. (2) R.C.O. Males.

DARLINGTON MEMORIAL HOSPITAL.—H.S. (male) for the Aural and Ophthalmic Department.

DERBY: DERBYSHIRE ROYAL INFIRMARY.—H.S. (male, unmarried).

DONCASTER ROYAL INFIRMARY.—(1) Casualty H.S. (2) H.S. Males. (3) H.S. to Ear, Nose, Throat, and Eye Departments.

EDINBURGH HOSPITAL FOR WOMEN AND CHILDREN.—J.H.S. (female).

EDINBURGH: ROYAL INFIRMARY.—Non-resident Clinical Assistant in the Ear, Nose, and Throat Department.

EVELINA HOSPITAL FOR SICK CHILDREN, Southwark, S.E.—H.S. (male).

GLASGOW EYE INFIRMARY.—(1) R.H.S. (2) Resident Assistant H.S.

GREAT BARROW: EAST LANCASHIRE TUBERCULOSIS COLONY, near Chester.—H.P. (male).

GROCERS' HALL, E.C.—Three Medical Research Scholarships.

GUILDFORD: ROYAL SURREY COUNTY HOSPITAL.—H.S. (male).

HALIFAX COUNTY BOROUGH.—R.M.O. at the Hospital for Infectious Diseases.

HARROGATE ROYAL BATH HOSPITAL.—R.M.O. (male).

HOSPITAL OF ST. JOHN AND ST. ELIZABETH, Grove End Road, N.W.—R.H.S. (male).

HOSPITAL FOR SICK CHILDREN, Great Ormond Street, W.C.—(1) H.P. (2) H.S. (3) Resident Aural Registrar. Males, unmarried. (4) Sebag-Montefiore Research Fellowship.

HOSPITAL FOR WOMEN, Soho Square, W.—Anaesthetist.

HULL ROYAL INFIRMARY.—Hon. Assistant S.

INFANTS HOSPITAL, Vincent Square, S.W.—H.P.

KENSINGTON ROYAL BOROUGH.—Whole-time Assistant M.O.H. and Tuberculosis Officer.

KIDDERMINSTER AND DISTRICT GENERAL HOSPITAL.—H.S. (male).

KINGSTON-UPON-HULL CITY AND COUNTY.—Assistant M.O.H. (male).

LANCASTER: ROYAL LANCASTER INFIRMARY.—Senior H.S. (male, unmarried).

LIVERPOOL: ROYAL SOUTHERN HOSPITAL.—Hon. Orthopaedic S.

LONDON COUNTY COUNCIL.—(1) A.M.O. (Grade I) at Bethnal Green Hospital, E. (2) A.M.O. (Grade II) at (*a*) St. Stephen's Hospital, Fulham Road, S.W. (*b*) St. George-in-the-East Hospital, Wapping, E. (*c*) St. Andrew's Hospital, Bow, E. (*d*) Bethnal Green Hospital, E. (3) H.S. and H.P. at St. Andrew's Hospital, Bow, E. Males, unmarried. (4) Resident Medical Superintendent at Grove Hospital, Tooting Graveney, S.W.

LONDON LOCK HOSPITAL, Dean Street, W.—R.M.O. to the Male Departments.

LUTON: BUTE HOSPITAL.—H.S. (male).

MANCHESTER: ANCOATS HOSPITAL.—H.S's.

MANCHESTER: CHRISTIE HOSPITAL AND HOLT RADIUM INSTITUTE.—Whole-time appointment on the Medical Staff.

MANSFIELD AND DISTRICT HOSPITAL.—(1) Senior H.S. (2) H.S. Males.

MARGATE AND DISTRICT GENERAL HOSPITAL.—R.M.O. (male).

MERTHYR GENERAL HOSPITAL.—R.H.S.

MIDDLESBROUGH: NORTH RIDING INFIRMARY.—C.O. (male, unmarried).

MIDDLESEX HOSPITAL, W.—Assistant Orthopaedic S.

MIDHURST: KING EDWARD VII SANATORIUM.—Second A.M.O.

NEWCASTLE-UPON-TYNE, CITY AND COUNTY OF.—Resident Medical Assistant.

NORTHAMPTON GENERAL HOSPITAL.—(1) H.S. (2) C.O. Males. (3) Hon. Assistant S.

NORWICH: NORFOLK AND NORWICH HOSPITAL.—H.S. (male).

NOTTINGHAM CHILDREN'S HOSPITAL.—R.H.P. (female).

NOTTINGHAM GENERAL HOSPITAL.—C.O. (male).

PETERBOROUGH AND DISTRICT MEMORIAL HOSPITAL.—R.H.P. (male).

POPLAR HOSPITAL FOR ACCIDENTS, E.—Hon. Assistant (*a*) P. and (*b*) S. in charge of Out-patients.

PORTSMOUTH CITY.—(1) Visiting Orthopaedic S. (2) Visiting Skin Specialist.

PRESTON AND COUNTY OF LANCASTER ROYAL INFIRMARY.—(1) H.S. (2) C.O. Males, unmarried.

PRINCESS ELIZABETH OF YORK HOSPITAL FOR CHILDREN, Shadwell, E.—(1) H.P. (2) C.O.

READING: ROYAL BERKSHIRE HOSPITAL.—R.M.O. (male) at Blagrave Branch Hospital and Assistant to Pathologist.

ROYAL FREE HOSPITAL, Gray's Inn Road, W.C.—R.C.O. (female).

ST. BARTHOLOMEW'S HOSPITAL, E.C.—Whole-time Research Officer in the Deep X-Ray Therapy Department.

ST. GEORGE'S HOSPITAL, S.W.—Assistant Dental S.

ST. MARY'S HOSPITAL, W.—A.M.O. in charge of the X-Ray Department.

SAMARITAN FREE HOSPITAL FOR WOMEN, Marylebone Road, N.W.—H.S.

SCARBOROUGH HOSPITAL AND DISPENSARY.—Two H.S. (females).

SHEFFIELD: JESSOP HOSPITAL FOR WOMEN.—H.S. (male).

SHEFFIELD ROYAL HOSPITAL.—C.O.

SHEFFIELD UNIVERSITY.—Chair of Anatomy.

SHREWSBURY: ROYAL SALOP INFIRMARY.—R.H.P. (male).

STEPNEY METROPOLITAN BOROUGH.—Assistant Tuberculosis Officer and Assistant M.O.H.

STOCKPORT COUNTY BOROUGH.—R.A.M.O. (male) at Stepping Hill Hospital.

SWANSEA COUNTY BOROUGH.—(1) Deputy Medical Superintendent at Cefncoed Mental Hospital. (2) R.M.O. (male, unmarried) at the Infectious Diseases Hospital.

SWANSEA GENERAL AND EYE HOSPITAL.—C.O. (male, unmarried).

SURREY COUNTY COUNCIL.—J.R.A.M.O. at the County Sanatorium, Milford.

TAUNTON AND SOMERSET HOSPITAL.—Senior House M.O. (male).

VICTORIA HOSPITAL FOR CHILDREN, Chelsea, S.W.—Casualty Sorting Officer.

WARRINGTON COUNTY BOROUGH.—R.M.O. (male, unmarried) at the Borough General Hospital.

WEST END HOSPITAL FOR NERVOUS DISEASES, Gloucester Gate, N.W.—R.H.P.

WEST LONDON HOSPITAL, Hammersmith, W.—(1) Hon. S. (2) Non-resident C.O. (male).

WILLESDEN GENERAL HOSPITAL.—R.C.O. (unmarried).

WILTS COUNTY COUNCIL.—Assistant County Dental Officer (male).

WINDSOR: KING EDWARD VII HOSPITAL.—H.S.

CERTIFYING FACTORY SURGEONS.—The following vacant appointments are announced: Leominster (Herefordshire), Peebles (Peeblesshire). Applications to the Chief Inspector of Factories, Home Office, Whitehall, S.W.1, by March 26th.

This list is compiled from our advertisement columns, where full particulars are given. To ensure notice in this column advertisements must be received not later than the first post on Tuesday mornings. Further unclassified vacancies will be found in the advertising pages.

APPOINTMENTS

ANSON, C. E. H., M.B., B.S., Medical Superintendent, Benenden Sanatorium, Kent.

BRINTON, D. H., B.M., M.R.C.P., Physician in Charge of the Department for Nervous Diseases, St. Mary's Hospital, W.

DIVINE, Douglas, M.B., B.Ch., Honorary Anaesthetist, Hull Royal Infirmary.

LLOYD-DAVIES, O. V., M.S., F.R.C.S., Honorary Assistant Surgeon, St. Mark's Hospital, City Road, E.C.

SPARKS, J. V., M.R.C.S., D.M.R.E., Assistant Director of Radiological Department, Hospital for Consumption and Diseases of the Chest, Brompton, S.W.

TIZZARD, T. H. S., M.B., Ch.B.Glas., Junior Honorary Ophthalmic Surgeon, Eye Infirmary, Bath.

LONDON COUNTY COUNCIL.—The following appointments have been made at the hospitals indicated in parentheses: *Senior Assistant Medical Officer, Grade I:* R. G. Henderson, M.D., Ch.B., D.P.H. (South-Eastern); *Senior Assistant Medical Officer, Grade II:* H. B. Hodson, M.D. (Grove Park).

CERTIFYING FACTORY SURGEONS.—J. L. Dudgeon, L.R.C.P., L.R.C.S. Ed., L.R.F.P.S.Glas., for the Old Deer District (Aberdeenshire); W. Harkins, M.B., Ch.B.Aberd., for the Strichen District (Aberdeen); R. Herwald, M.B., Ch.B.Birm., for the Falmouth District (Cornwall).

BIRTHS, MARRIAGES, AND DEATHS

The charge for inserting announcements of Births, Marriages, and Deaths is 9s., which sum should be forwarded with the notice not later than the first post on Tuesday morning, in order to ensure insertion in the current issue.

BIRTHS

BENTON.—On March 8th, at the City Hospital, Nottingham, the wife of Sidney B. Benton, M.R.C.S., L.R.C.P., of a son.

HILL.—On March 12th, to Marion, wife of Dr. Charles Hill, a daughter.

DEATH

JONES.—On February 24th, at Duchess Nursing Home, Beaumont Street, London, Hugh E. Jones, M.R.C.S., L.R.C.P.Lond., Haul-a-Gwynt, Bangor, late Rodney Street, Liverpool, aged 73 years.

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